
CENTRAL SERVICE AREA
REVIEW

F r a z e r R e a d

1 9 9 8

Declaration

The material in this project is original except where due acknowledgement is given and has not been accepted for the award of any other degree or diploma.

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Acknowledgement

Sincere thanks are extended to the Hobart City Council and the many people who have supported me in the preparation of this report. I would especially like to thank Barry Holmes for his advice, supervision and ongoing encouragement, Steve Jeffery for his cartographic contributions in the preparation of the maps and James McIlhenny for his proof reading. Thanks are also extended to Damien Mugavin.

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1. Introduction

1.1. Preface

Much inner city planning in recent years has focused on the opportunities for residential development. This is exemplified through programs such as the ‘Better Cities’ initiative. The role and needs of commercial uses in such areas have arguably been neglected in terms of research and policy formulation. Central service areas in particular have been the focus of little research.

Typically, these central service areas involve uses such as body works, wholesale, commercial and specialist warehousing, which serve the central areas but are inappropriate to the city ‘core’.

These uses are generally less glamorous and are often associated with heavy transport movements, noise and smell emissions. Additionally, many are characterised by large sites or ground floor areas and as a consequence these uses usually locate in areas of lesser land value which are still convenient to the CBD.

As land values are basically subservient to economic theory on supply and demand, these central service uses usually ‘pop up’ in areas where obsolete land uses make available land or buildings for such uses. Typically this has involved inner residential areas experiencing deterioration and displacement.

The co-location of a mix of residential and non-residential uses raises many planning issues. How should these areas function? Should a mix of residential and non-residential uses be encouraged in such areas? How should a planning authority manage the future of such areas?

1.2. Aim

The aim of this study is to examine the purposes and nature of inner city mixed central service areas, evaluate policy frameworks and recommend planning controls for their ongoing viability and efficiency.

1.3. Outline of Chapters

The following is a summary of the content of each chapter:-

Chapter 2 - Theory of Frame Areas of Cities and Central Service Uses

This is an introductory chapter which examines the planning theory behind the ‘frame’ area of cities and sets the context for the study with an examination of relevant planning theory on the operation of central service areas.

Chapter 3 - Introduction to the Case Study

Chapter 3 introduces some applied research to the topic by way of a case study of a central service area within the municipality of Hobart to exemplify issues relating to the operation of such an inner city area.

Chapter 4 - Evolution of the Case Study Area and Regional Perspective

To understand the operation and functions of the case study area within the 'frame' district, it is first important to consider its evolution and role within Hobart. This chapter briefly traces the evolution of the study area in relation to theory raised in Chapter 2 and considers its role within the Hobart region.

Chapter 5 - Planning Controls for the Study Area Under CHPS 1982

This chapter provides technical analysis of the policy framework and planning controls for the study area which have directed development since 1984. It provides interpretation as to the consistency and combined effect of both the objectives and numeric schedules of the planning scheme. It acts as a platform for the case study analysis of the status quo, development trends, and the impressions and attitudes of occupants of the study area.

Chapter 6 - Existing Characteristics of the Case Study Area.

This is essentially a brief examination of the basic characteristics of the case study area in terms of existing land use, building stock, form, density and traffic movements.

Chapter 7 - Development Application Review 1984 -1998

This chapter, through a review of planning applications, examines how the case study area has performed under the operation of the City of Hobart Planning Scheme 1982 which has specific provisions for 'central service' type uses. Results gained from this research will provide some insight as to development demand and appropriateness of this planning framework.

Chapter 8 - Perceptions of the Study Area from it's occupants

Perceptions of residents and businesses within the study are reviewed in this chapter to provide further input as to the appropriateness of the current planning controls and to help identify directions for improvement.

Chapter 9 - Summary of Issues in the Study Area

This chapter draws the findings of the above case study chapters together under a series of sections. It discusses whether the existing planning controls are appropriate.

Where not, areas which require amending are indicated to ensure the future viability and efficiency of use of this case study area.

Chapter 10 - Recommendations

This concluding chapter recommends new objectives, performance criteria and design parameters to guide future development and operation of the case study area. These recommendations are consistent with the objectives of the Resource Management and Planning System of Tasmania and are based on the same format as the Model Planning Scheme.

Although these recommendations stem from the context of the case study area they are based at a conceptual level and provide common principles which are likely to relate to many central service areas of cities rather than exclusively for Hobart.

2. Theory of Frame Areas of Cities and Central Service Uses

2.1. Introduction

This chapter examines the planning theory behind the 'Frame Area' and reasons why Central Service uses locate within such areas. It establishes why they evolve and investigates their functions as a component of the Central Business District.

2.2. The Concept of the Frame Area

Much debate exists over the precise area as defined by the terms 'Zone of Transition', 'Transition Zone' and 'CBD Fringe'¹ (See figure 2.2). This study does not intend to discuss this further, as these terms have been debated at length in previous studies.

The 'frame' area lies between the core district or Central Business District (CBD) and the Residential districts and has three characteristics:-

- i) it is primarily an area of residential deterioration,
- ii) its inner margins are characterised by the appearance of encroaching businesses and industry, and
- iii) the deterioration is caused by anticipation of industrial and commercial invasion.

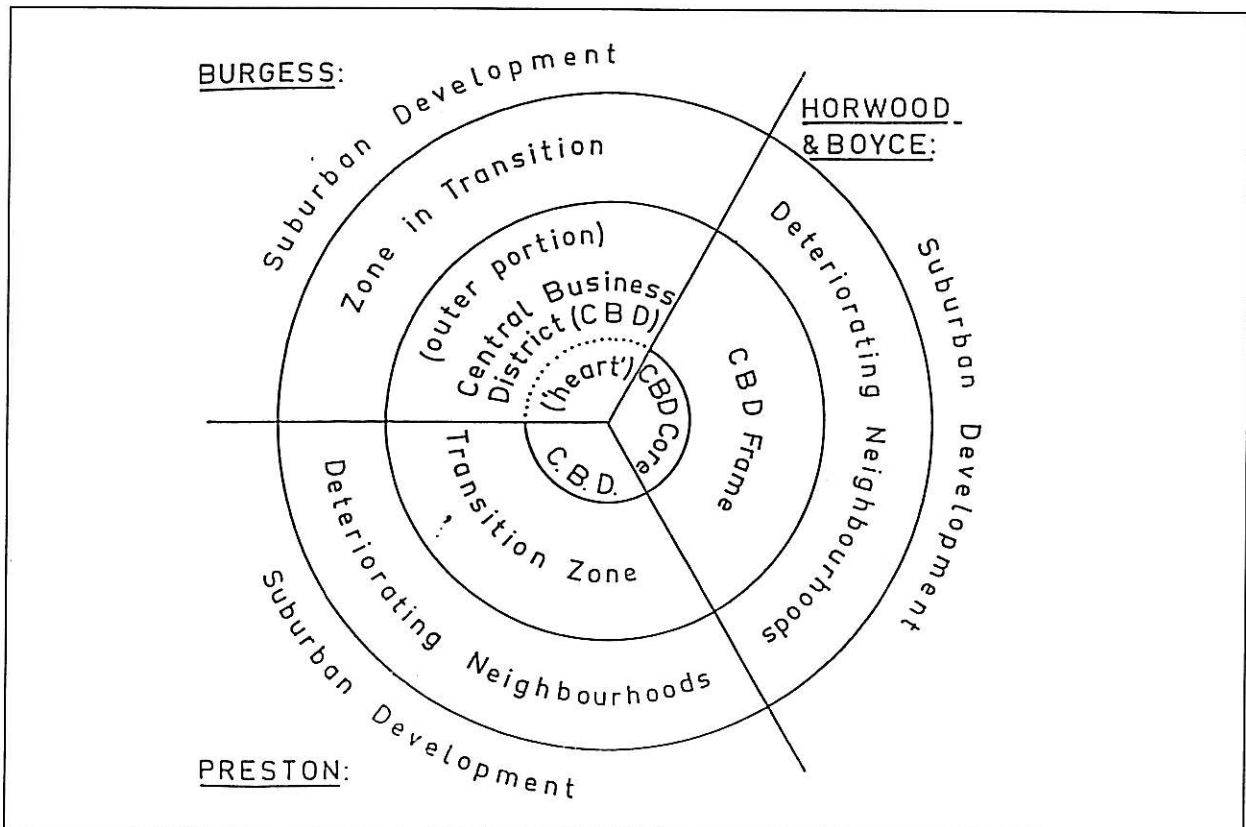


Figure 2.2 - Comparison of Terminology of the Major Contributors to 'Transition Zone Theory' (Source Kays, 1970)

¹ Kays, S - "Transition Zone Theory and Land Use in Central Hobart", Unpublished Thesis, University of Tasmania, 1970.

2.3. Historical Planning Thinking on the Evolution and Functions of Cities

Historical thinking on the planning and development of cities has been divided into two ‘camps’. The theorists, who analysed the layout of the city and its operation and evolution in reality, and the philosophers who prescribed what the functions and land use of such areas should ideally be if the city was to function to the optimum.

Early theorists identified the CBD as a distinctive region within the framework of the city. This work dates from early models of the city structure formulated by the Chicago School in the 1920’s. The best known of these models is the concentric zone theory of Ernest Burgess² (See figure 2.3.1). This model was based on the assumption that the land values decline from a central point in the city. The essence of this being that as a city grows, it expands radially from its centre to form a series of concentric zones. Using Chicago as an example, Burgess identified five of these. They were - the CBD, the zone of transition, the zone of independent workingman’s homes, the zone of better residences, and a commuter zone. As you would expect, the CBD contained the department stores and shops, offices buildings, places of entertainment, and civic buildings. It was encircled by a wholesaling district. The “zone in transition” comprised an area of residential deterioration resulting from the encroachment by commercial use and was characterised particularly by rooming houses.

Homer Hoyt³ was perhaps the earliest critic of the Burgess model. He argued that the areas in American cities tended to conform to a pattern of sectors rather than of concentric circles. Land uses would focus along axes of communication and therefore direction was more important than distance in determining city structure.

However both Burgess and Hoyt’s models tended to oversimplify, and a more realistic interpretation arose with the publication of Harris and Ullman’s model of a city characterised by multiple nuclei in 1945.

Their model was based on analysis that cities formed through the networking of a number of small separate nuclei rather than growing around a single CBD. Many of these nuclei would retain their identity within a larger settlement and would often become the focus for specialised activities. In this way, a city would form neither into sectors nor zones but into a patchwork of different discrete areas.

A number of subsequent theories into the nature of the ‘transition zone’ have arisen. This concept was reassessed by Hoover⁴ with consideration given to ‘modern’ changes in behaviour. He alluded that as a result of bulk transport and trucks, the uses that Burgess included as being located within the zone of transition, like manufacturing, wholesaling and warehousing would need to be located near the freight handling or ‘trans-shipment zones’. In addition Hoover saw the ‘blight’ or disease of the transition zone being more than deterioration resulting from the expansion of industry and

² Duncan Sim - “Change in the City Centre”, Gower Publishing Company Ltd, Hampshire, 1982, P.1.

³ Hoyt, H - The Structure and growth of residential neighbourhoods in American Cities, U S Federal Housing Administration, Washington, 1939.

⁴ Hoover, E M - “The Location of Economic Activity”, New York, 1948

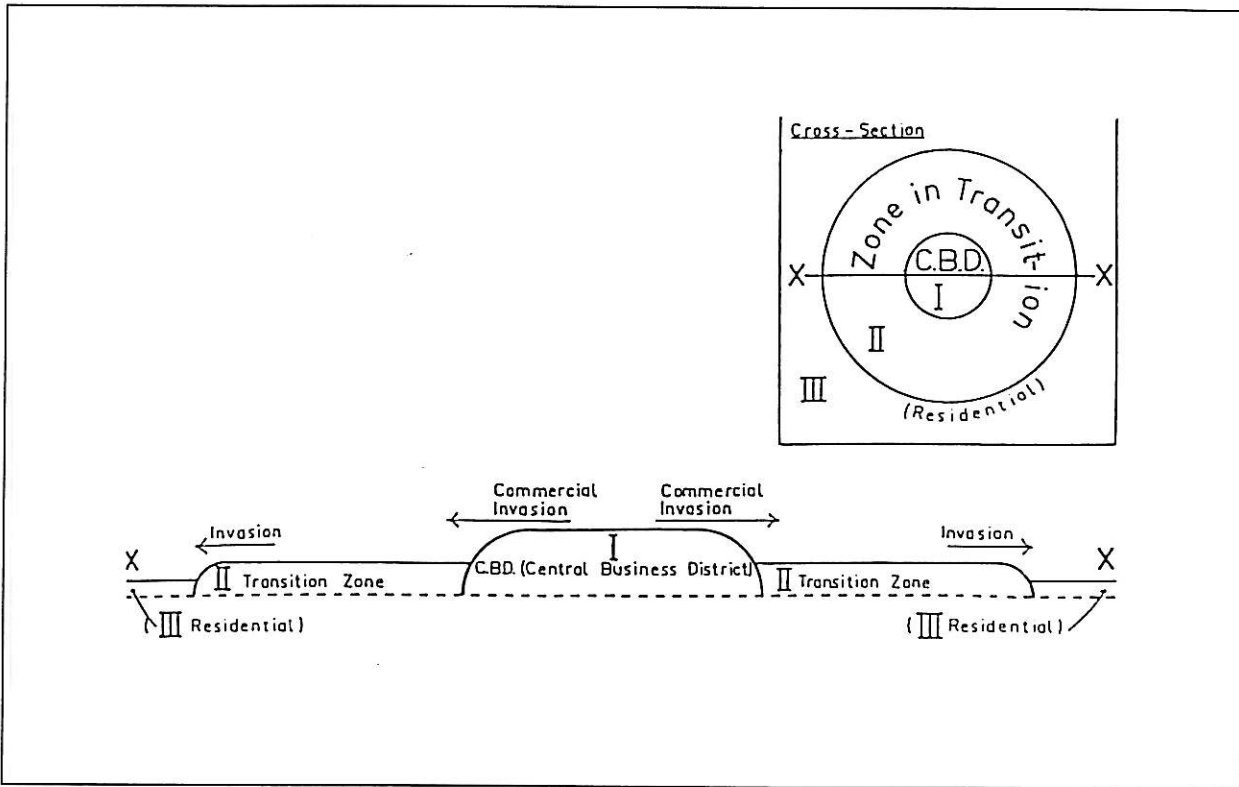


Figure 2.3.1 - Central City Development in the 1920's (According to Burgess)

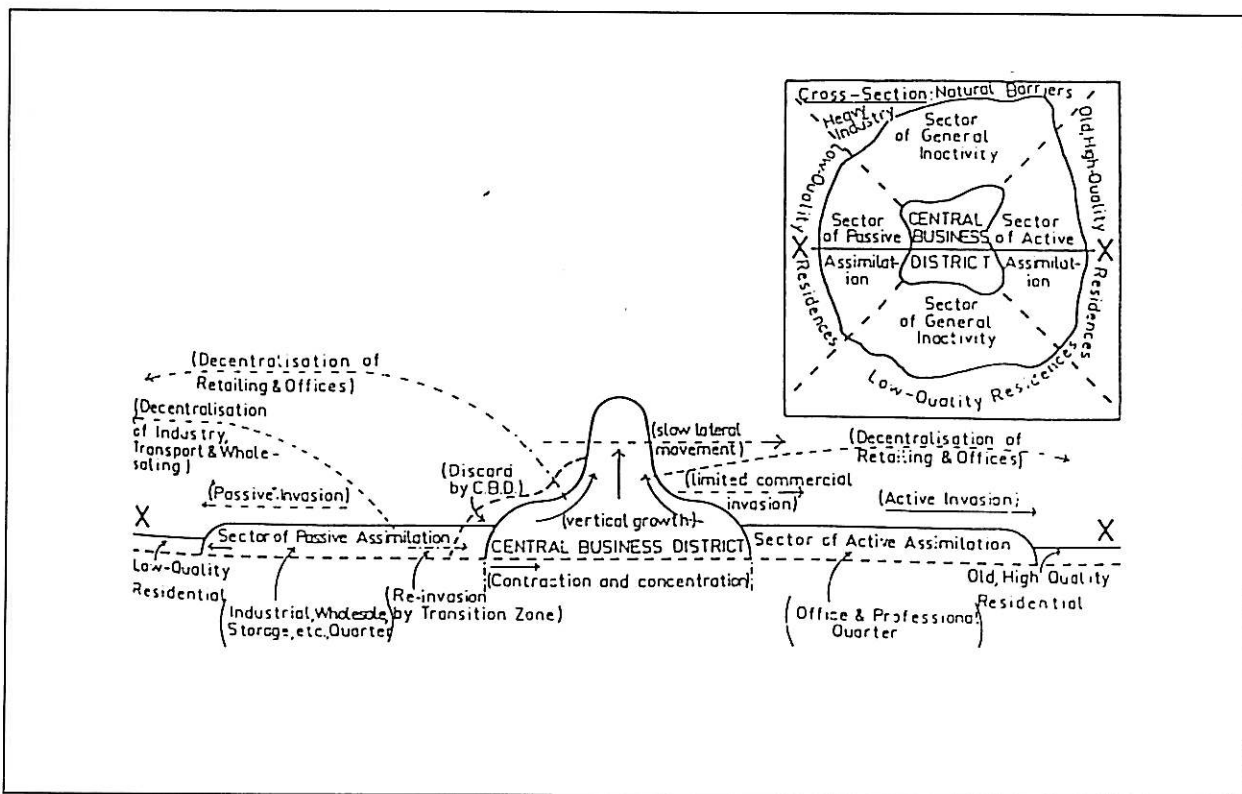


Figure 2.3.2 - Central City Development according to Preston (1966)

commerce. He believed that the state of underutilisation was due to this being anticipated and not eventuating as a result of a number of factors:- Firstly, the expected outward expansion of the CBD had been offset by its vertical growth and secondly the dispersal created by trucks and motor cars, both in their effect on commercial and residential patterns, also contributed to the blight.

In 1966, Griffin and Preston claimed that:-

*“The area is no longer a fluid environment where business and industry expand uniformly through land use invasion and succession, for the period of central city rapid growth is gone, in all probability for ever, and interpretation based on this premise are no longer valid. ... the process of invasion and succession is slowing down, even stopping in certain instances in some sections peripheral to the downtown.”*⁵

These trends are widely recognised by other authors such as Horwood⁶ and Boyce who hold similar views while others are more extreme in claiming the area to be stagnant or essentially non-transitional⁷.

As stated, the main or underlying causes involve improvements in the technologies of transport and building although other factors are also influential. Among these more minor factors, Griffith and Preston⁸ listed the artificially high land values. They argued that speculation continues in ignorance of the changed circumstances and discourages potential stable activities. Changed building technology and preferences were regarded by them as more critical factors and are probably most obvious in the urban landscape. The changes in technology mentioned refer to the appearance of steel framed sky scrapers. The influence of these innovations is reflected most in the location of the central city's office component.

A vertical expansion of the CBD absorbed most of the growth of the office function and in many circumstances, drew in established elements from cramped, ageing premises above ground floor shops. The latter trend has often contributed to the contraction of the CBD and therefore its outward expansion has largely ceased. The consequential development pressure on surrounding zones has been virtually removed. Such high rise office development tended to favour the side of the CBD nearest to high-quality residential areas and commercial invasion was mainly restricted to the 'Sector of Active Assimilation' (see Figure 2.3.2). This tendency often leaves in its wake a 'Zone of Discard' on the opposite side of the CBD where deterioration is evident and re-invasion by the surrounding 'transition zone' occurs with wholesaling, storage, light industrial and transportational elements, low quality commercial ribbon development, service outlets, vacancy, used car lots and residential components in

⁵ Kays, S - "Transition Zone Theory and Land Use in Central Hobart", Unpublished Thesis, University of Tasmania, 1970.

⁶ Horwood, E M & Boyce R R - "Studies of the Central Business District and Urban Freeway Development", Seattle, 1959, P. 19.

⁷ Bourne, L S - "Comments on the Transition Zone Concept", Professional Geographer, Vol 20, P313-316.

⁸ Preston, R E - "The Zone in Transition: A Study in Urban Land-Use Patterns", Economic Geography, Vol 42, 1966, pp.236-260.

upper storeys above commercial outlets and older houses. Preston called this zone of discard the 'Sector of Passive Assimilation'.

Although these particular technological changes have not directly acted on the transition zone, their effect on the core has removed most of the pressure on the inner margins of the zone, contributing to the slowing of the zone's outward movement. Changed preferences in building style or types have had a more direct effect on the zone. Many industrial activities use production line techniques and are best suited to spacious, single storey premises. As a result, they are precluded from locating in the cramped inner city area with associated high land values. Therefore much of the industry which could have located in the zone is excluded which further contributes to the retarded growth rate.

The improvement and availability of motorised transport since the 1920's is undoubtedly the most critical factor behind the changing nature of the transition zone. It has had both a direct effect (through the truck) and indirect effect (through the motor car).

The motor car has influenced the zone indirectly by shaping the development of other parts of the city. Above all, its widespread use has facilitated the growth of suburbanisation, which has also seen demand grow for large scale shopping centres. Additionally, decentralisation of retailing has changed the role of the CBD to more specialist type uses, drawn away its customers and limited its expansion. Evidence of this trend is well acknowledged.

The truck has had a more direct influence on the transition zone by making the relocation of industry and wholesaling both possible and desirable (to avoid congestion). It has meant decentralisation of these elements to the periphery of the city. When it is considered that the commercial and industrial growth within the zone itself has reduced, together with the decreased pressure from the CBD, the reasons behind the almost static nature of the zone today are clearly apparent.

The above analysis provides a platform to understand the operation of the 'frame' element of cities today. However these theorists provide little in the way of solutions or approaches to planning for the betterment of these areas. During the same period, it was the philosophers who provided the direction to how a city should evolve. The most dramatic of these with their utopian approaches were the modernist designers.

2.4. Planning Philosophies for Cities

Modernist planning and the 'Garden City Movement' were part of a push to 'clean up' the industrial city form which was seen as unhealthy and no longer suitable given the changing circumstances of the industrial revolution.

In 1898 Ebenezer Howard⁹ led the movement against the overcrowded and unhealthy characteristics of the industrial city. He proposed to halt the growth of London and repopulate the countryside where villages were declining, by building a new kind of town. This was called the Garden City and involved a series of self sufficient towns designed for a population of 30,000. The Garden City was encircled by a belt of agriculture, industry, schools, housing and parks. In the centre were the commercial, club and cultural places. This thinking was one of the first steps towards suburbanisation, where people would live on the city fringes in open spaces instead of inside the crowded and cramped cities themselves.

Le Corbusier was another modernist planning philosopher who supported an exclusionary zoning approach to the ordering of cities. He said the traditional city form of narrow winding streets and mixed land use was inefficient and redundant. His vision in planning terms, was essentially a land use zoning approach. Each component of the modern city would have an area allocated in the city structure which would prevent conflicts between a mix of uses. For example, in his scheme skyscraper office blocks dominated the central CBD. The residential neighbourhoods then surrounded this central core with industrial and service zones for the city located beyond the central city on the outskirts.

These Modernist philosophies had a strong following for the first half of the Twentieth Century, with many examples constructed in Europe and America. It wasn't until 1961 that this thinking was challenged by Jane Jacobs. She attacked this exclusive zoning approach to planning.

Jacobs said that this approach created sterile and lifeless cities. She believed that the approach was obstructing the spontaneous diversity of the city where the intricate mixing of different uses in cities provided not chaos, but a "highly developed form of order"¹⁰.

Jacobs also considered the concept of safety in a 24 hour city. She found that in areas of cities where people lived above and among shops, crime rates were lower due to what she termed "eyes on the street". In these areas city streets were not dead and deserted after working hours, but became part of people's personal territory in which they had an interest.

In Australia, the most significant contemporary thinking on urban use and development has been led by the 'Better Cities Program'. It was a Commonwealth initiated strategy which recognised the need to develop better ways to use existing land with more effective development processes aimed at best practice.

The strategy was based on reasoning that the inner areas of most Australian cities, with decreasing levels of population and changes to industry, resulted in derelict industrial sites and under-used infrastructure. One aspect of the program was directed at more

⁹ Howard, E - "Garden Cities of Tomorrow",

¹⁰ Jacobs, J - "The Death and Life of Great American Cities", Random House, USA, 1961, P. 235.

efficient use of established services and facilities with these under-utilised inner city sites being rejuvenated and reused for housing and mixed use development.

The development of mixed land use options was central to the philosophy for liveable and sustainable cities. Inner city rejuvenation would allow people to live, work and shop within the one area. This would create alternative choices and options for people and make more efficient use of existing resources. The program encouraged better land use to reduce the distances that people and freight would need to travel, thus saving on road expenditure and reducing air pollution and traffic congestion.

2.5. Performance Based Planning

The occurrence of mixed use development undermines the basic assumption of traditional zoning, which is that different uses must be physically separate or distant from one another in order to protect themselves from each other. However, the reasons for the segregation of land uses which have driven zoning regulations over the past 60 - 70 years are now less relevant. Industries are cleaner and less noisy and new technology is providing more and more opportunities to change patterns of retailing, commerce, industry and recreation.¹¹

Parallel with this concept, a 'performance based' approach to planning is currently considered best planning practice. This method of planning is 'results based' where planning schemes are structured to allow where possible, an application for use or development to be considered using either of two sets of criteria. The Draft Model Planning Scheme for Tasmania (Model Scheme)¹² is an example of this approach.

Under the Model Scheme proposed use or development must demonstrate compliance with the planning scheme either by:

- *the use of acceptable solutions; or*
- *through the use of performance criteria*

Acceptable solutions are provided as examples of what is considered acceptable to enable the objective to be achieved.

Performance criteria are statements of means of achieving the objective.

Essentially, the successful implementation of a performance based planning approach, for example would allow a light industry to locate adjacent to a residential use if it meets performance criteria for noise and smell emissions as well as traffic movements. In theory this should eliminate conflicts between the two uses and prevent loss of amenity, or at least provide a minimum acceptable level of amenity.

¹¹ Middleton, C - "Facilitation of Mixed Use Development", Occasional Paper Series 2, Better Cities Program, 1995, P124.

¹² DELM - "Draft Model Planning Scheme", 1997.

2.6. Conclusion

Central service areas typically include a mix of non-residential uses which serve the Central Business District. These uses include warehouses, saleyards, showrooms and light industries that need to be close to the city but do not need a prime location. Central service areas are usually found within the 'frame' district of a city between the CBD and the residential areas.

New technologies have altered the city structure and layout in a number of ways. New construction methods have seen vertical expansion of the CBD replace outward growth and motorised transport has allowed suburbanisation and decentralisation of commercial, light industrial, wholesaling and storage type uses familiar to central service areas. The combined result of these occurrences is that pressure for growth in inner areas has reduced and many 'frame' areas of cities are now static.

Contemporary planning thinking has moved away from an exclusionary zoning to mixed land use and 'performance based' systems. It is considered that this approach has better potential to achieve desired outcomes and manage economic, environmental, cultural and social factors in the planning process.

This study will now turn to an example central service area, to the north of the Hobart CBD, and examine the specific processes that are seen and occur.

3. Case Study

3.1. Introduction

The previous chapter examined the planning theory and characteristics of mixed use, central service areas. It revealed that post industrial evolution of cities has often included a distinct wholesaling and light manufacturing component within their 'frame area'. Historically such areas, termed central service areas in this study, have displayed three basic characteristics:- i) residential deterioration, ii) generally low land values, and iii) high availability of underutilised land in the vicinity.

This chapter introduces some applied research by way of a case study of a central service area within Hobart to exemplify these issues. This case study will evaluate the policy frameworks and planning controls for the ongoing viability of such areas including residential uses.

3.2. Background for the Case Study

The City of Hobart Planning Scheme 1982 defined a 'Central Service Zone' with an objective "*to provide for a changing diversity of general non-residential uses which reflect a transition between other Central Zones and inner residential areas*". This Central Service zoning is located in Hobart's 'frame' area, typically to the north and west of the CBD.

The case study area is defined by Brisbane, Harrington and Burnett Streets and the Brooker Avenue to the north east (See figures 3.2.1 & 3.2.2). It includes a large portion of this Central Service zoning.

The boundaries of this study area stem from a combination of existing land use, zoning and topography.

3.3. Aim of the Case Study

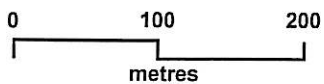
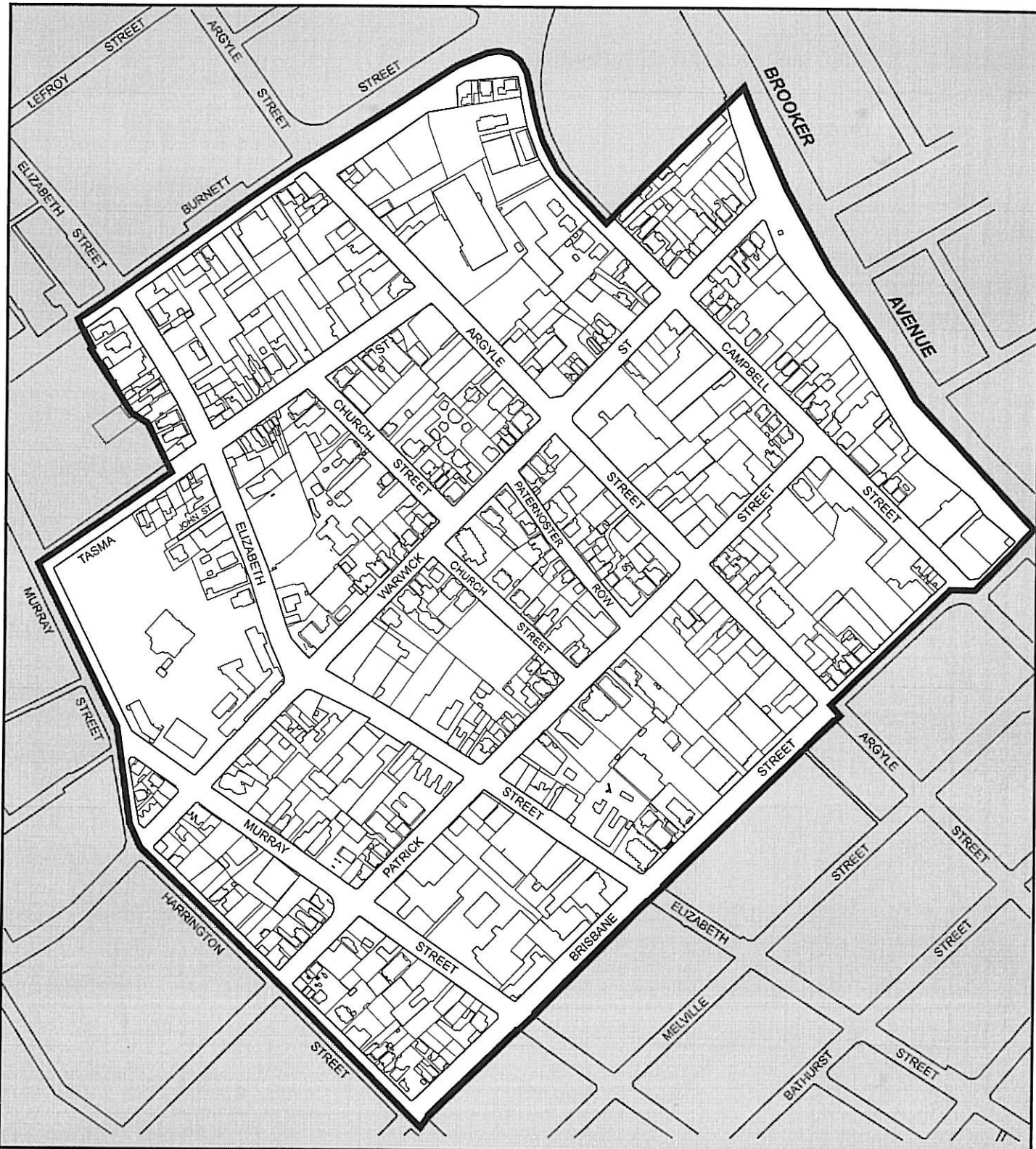
The aim of this case study is twofold. Firstly it is to provide applied research to exemplify the roles and functions of a central service area as an integral component of the CBD, and secondly to evaluate a policy framework and planning controls for the ongoing viability of such an area.

3.4. Methodology

After an initial investigation of the evolution and regional context of the case study area, the existing *City of Hobart Planning Scheme 1982* controls are reviewed as a platform to establish both the current situation and trends in land use. This is explored with an investigation of existing land use patterns and built form, and through a review of Planning Applications over the last fifteen years.

The perceived roles of residential, commercial and light industrial uses in this area are then considered with the assistance of surveys of residents and business operators.

Concluding discussions in light of the above analysis then lead to the recommended amendments to the existing planning framework which will ensure the future efficiency and viability of this central service area consistent with the objectives of the Resource Management and Planning System of Tasmania.



Boundary of case study area 

CASE STUDY AREA

3.2.1



0 100 200
metres

Boundary of case study area 

AERIAL PHOTOGRAPH

3.2.2

4. Evolution of the Case Study Area and Regional Perspective

4.1. Introduction

To understand the operation and functions of the case study area within the ‘frame’ district, it is first important to consider its evolution and role within Hobart. In a general sense, tracing the evolution of this part of the city may be related to some of the theory explored in Chapter 2.

4.2. Evolution of built form and land use

The evolution of Hobart, including that of the study area, was well documented by Solomon in 1976¹³. It was not considered to be of any great advantage to spend a lot of time on further review. This examination simply provides perspective through a brief outline of the growth and establishment of the study area since early European settlement.

From first settlement to the 1880s, most of Hobart’s people remained within one square mile. It wasn’t until the 1850s that wealthier people began to move outwards from the smells and congestion of the city centre into new suburbs. This was a trend that low income earners were unable to follow until the late 19th Century when cheap public transport became available.

¹³ Solomon R J - “Urbanisation - the Evolution of an Australian Capital”, Angus and Robertson Publishes, Sydney, 1976.

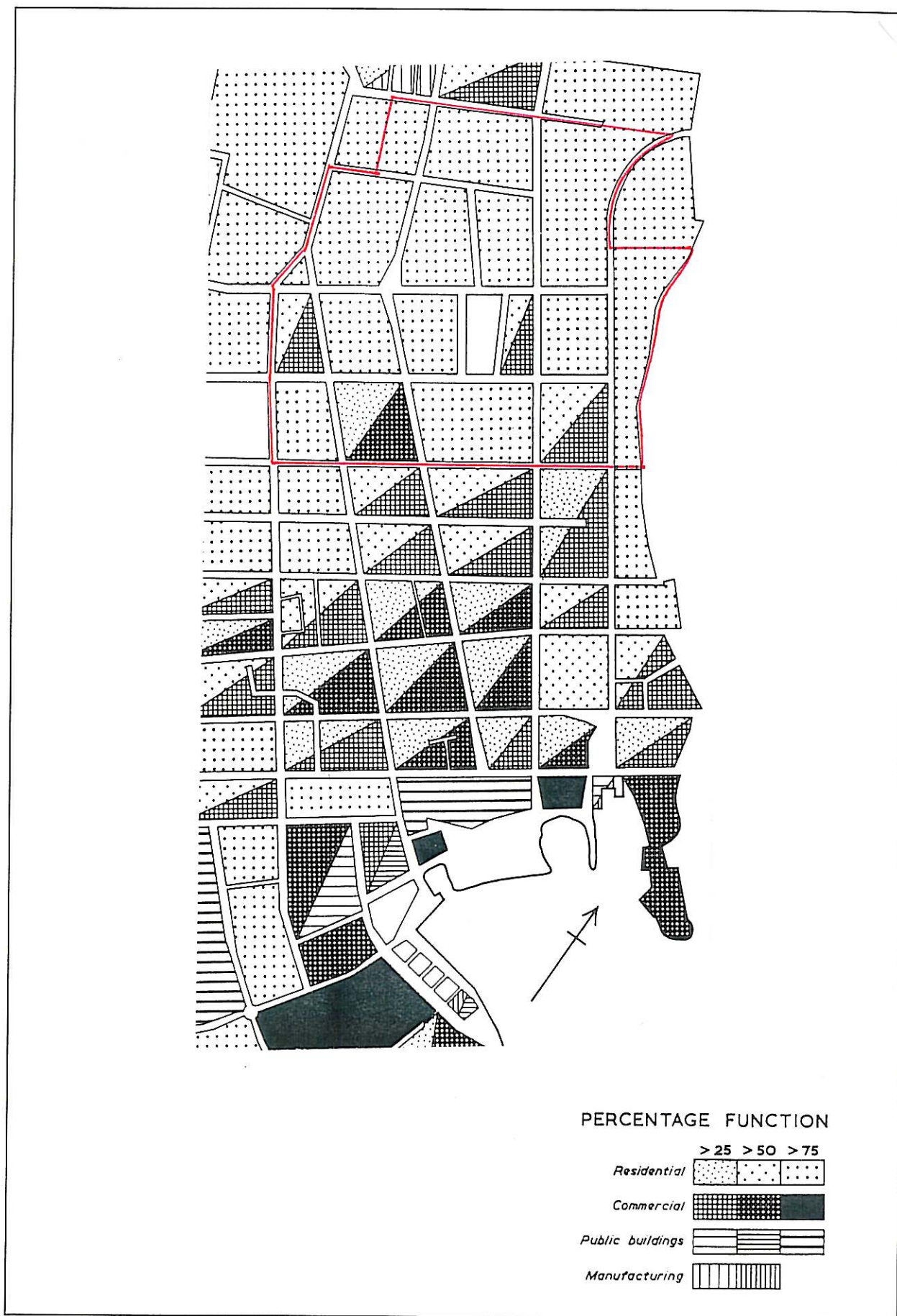


Figure 4.2.1 - Distribution of functions in Hobart 1847 (Source Solomon 1976)

In 1847, residential use was an intrinsic part of the case study area (See figure 4.2.1). The study area was predominately residential however, the commencement of the area's mixed use nature was apparent with four blocks towards the CBD containing twenty five percent commercial functions.

Figure 4.2.2 details the layout and built form which existed in 1841. This figure demonstrates a built form consistent with the area's residential function, with small, low density buildings aligned to the street in the traditional manner. However, Figure 4.2.1 suggests quite a few blocks with non residential 'bias' in terms of use. Elizabeth Street consisted mainly of the shop and residence typology. This was a combination commonly found throughout the commercial area, where shop owners lived above their stores.



Figure 4.2.2 - Survey Plan of Hobart Town 1841 (Source Solomon 1976)

By 1901, the residential function was disappearing from the central area, south of Bathurst Street, as the CBD expanded. It was still evident however in the surrounding blocks.

With the introduction of public transport, development began to extend along transport routes to the north. However, the existing lack of affordable private transport continued to influence development and densities increased in these blocks near to the CBD. This created an environment distinct from that in the evolving suburbs. This frame area evolved as higher density residential, with mixed commercial, and light industrial use in some enclaves.

At this point the influence of the Garden City Movement became prominent. This was not only the influx of new suburban dwellings but also in terms of attitudes towards higher density housing.

As considered in Chapter 2, the Garden City thinking stemmed from a fear of health problems associated with slum conditions in larger European cities and resulted in wholesale clearance of these slums in many cities. Such clearing occurred in Wapping and almost in Battery Point and North Hobart.

4.3. The First Modern Town Plan for Hobart

In 1945 Fred Cook produced a plan for Hobart, as a guideline for future development, founded in the 'Garden City' thinking. In it he recommended that some of the lower income housing and industrial areas be rezoned for industrial use, with the aim of replacing many of the "insanitary buildings ... with modern facilities".

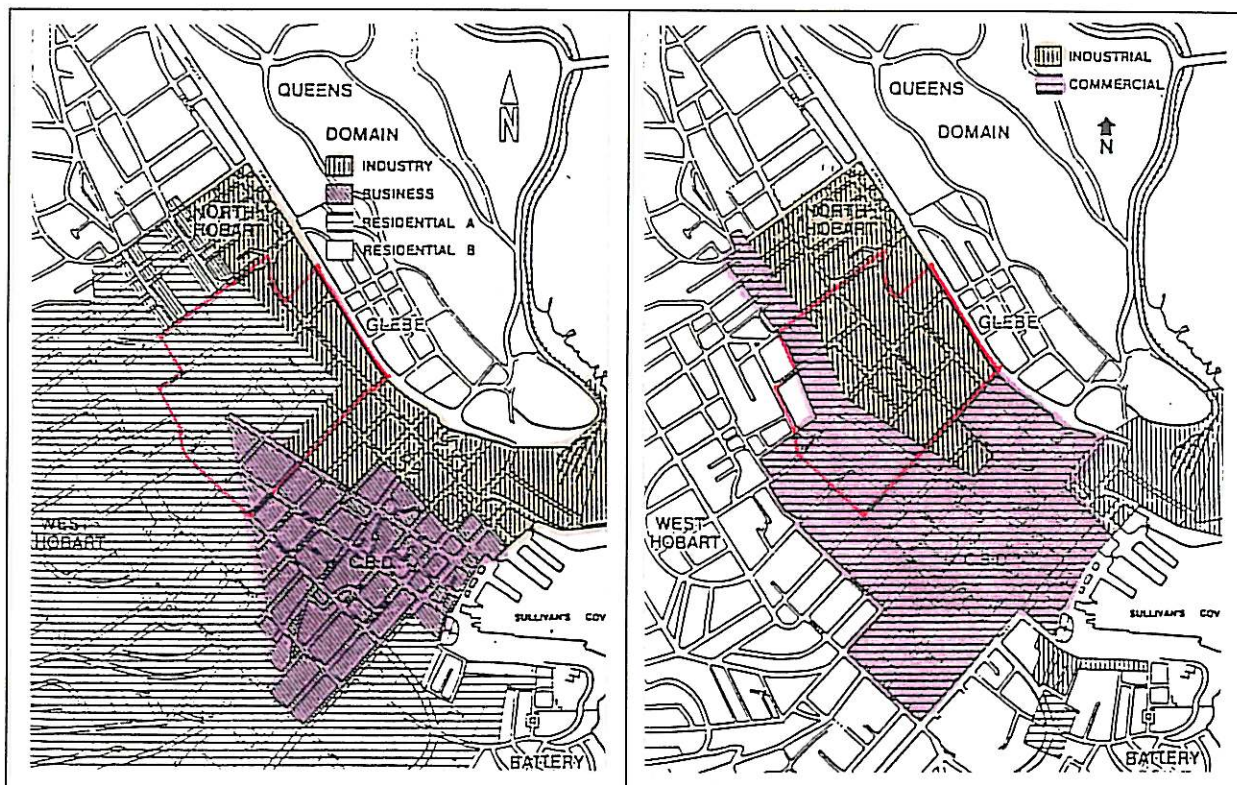
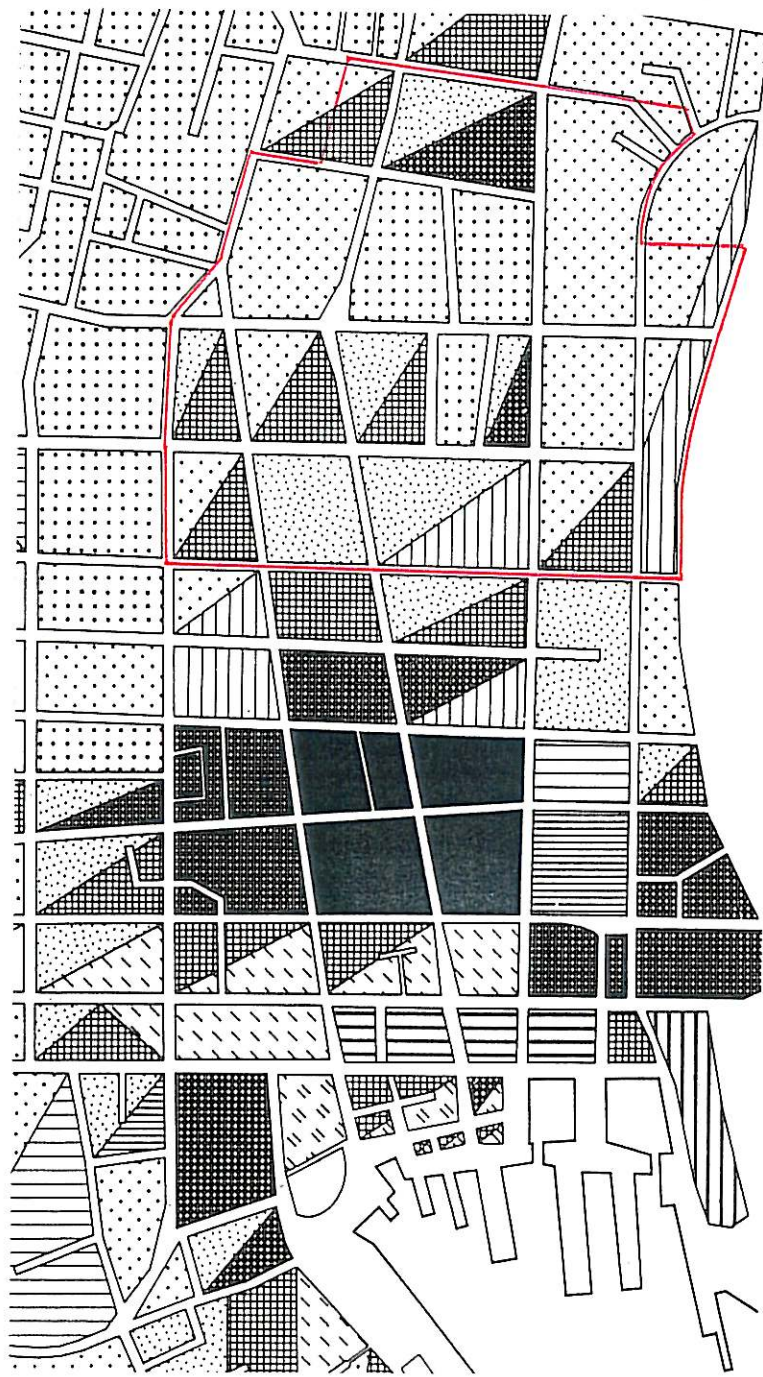


Figure 4.3.1 - Zoning Cook Plan
(Source Graham, 1981)

Figure 4.3.2 - By-Law Zoning 1951-73
(Source Graham, 1981)

Cook's zoning map showed areas along Campbell Street to North Hobart as industrial (see figure 4.3.1). The area to the north of the CBD, extending in a wedge along Elizabeth Street to Warwick Street was zoned commercial. The remaining area including that bounded by Burnett, Argyle, Patrick and Harrington Streets was zoned Residential A. This residential zoning was subject to "the highest restrictions on development" which maintained wider separations between houses and generous setbacks. These provisions saw a shift in the predominant building type from terraces and cottages, in close proximity to one another, to detached houses and bungalows.



PERCENTAGE FUNCTION

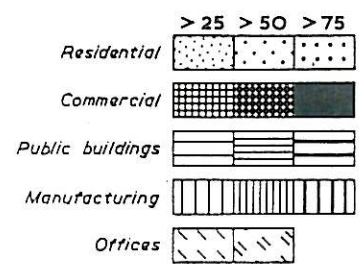


Figure 4.3.3 - Distribution of functions in Hobart 1954 (Source Solomon 1976)

demonstrates that by this time commercial and manufacturing uses had infiltrated the area strongly.

In 1951, Hobart City Council introduced a zoning By-law. This was based on Cook's Plan of 1945 and remained in place until 1973 (see figure 4.3.2). Under this law, extensive areas to the north of the city were zoned industrial, with the remainder zoned commercial. There was no longer any residential zoning in the inner city.

Under this planning framework the proportion of residential uses in this area fell from 68% to 47% between 1954 and 1978¹⁴. Many residences were demolished and overtaken by peripheral activities of the CBD, generally wholesaling, light manufacturing and used car lots.

4.4. The Hobart Regional Context

Hobart is the capital city of the island state of Tasmania. Greater Hobart has a population of approximately 180 000. It is situated in the south of the island, spreading along the shores of the Derwent estuary. The growth of the city has occurred in roughly a north south orientation restricted by steeply rising hills and mountains running parallel to the river. Consequently the built up area while only roughly 8km across at its widest point, is nearly 30 km long. The effect of this on urban growth in Hobart may have caused industry and retailing to decentralise at an earlier stage than would normally occur in other cities of the same population.

Within the City of Hobart, warehousing, wholesaling, light industrial and service uses are provided for in areas zoned Central Service under the City of Hobart Planning Scheme 1982. This zoning occupies areas to the north and south west of the CBD in the 'frame area' adjacent to inner residential areas of North and West Hobart and Glebe. A large portion of such zoning is located within the case study area. There are also areas of similar land use within Greater Hobart.

For the purpose of comparison, an attempt was made to collect time series, regional land use or employment data. This data could have demonstrated the changing land use characteristics of the case study area relative to that of Greater Hobart. However neither the Department of Environment and Land Management (now PIWE), or Australian Bureau of Statistics had any relevant records in this regard.

Nevertheless similarities to Preston's analysis of the city can be observed and assumptions made as to the effects of new technologies, suburbanisation and decentralisation of Greater Hobart on the outward growth of the CBD and characteristics of the 'frame' area.

A vertical expansion of the CBD can be observed particularly in the area to the south east of Collins Street. This shows uniformity with Preston's 'Sector of Active Assimilation' where high rise office and commercial development tends to favour the side of the CBD nearest to high quality residential areas. In this case however it is

¹⁴ HCC land use records 1978.

more likely the attraction of the river is more notable than higher quality residential development.

Conversely, a 'Zone of Discard' is evident on the opposite side of the CBD. This area includes the case study area which Preston would term a 'Sector of Passive Assimilation', where deterioration is evident as is re-invasion by wholesaling, storage, light industrial, transportation elements, low quality commercial ribbon development, service outlets, vacancy, used car lots, old houses and residential components in upper storeys above commercial outlets.

The effects of suburbanisation and decentralisation on the case study area are also apparent. It can be argued that decentralisation of retailing and residential activity, reflected in the clear growth of Clarence, Glenorchy and Kingborough, has removed much of the pressure for expansion of Hobart's 'core'. The majority of Greater Hobart's population lives in the suburbs and many of the larger industrial activities, with production line techniques and associated spacious single storey premises, are now better suited to the outer cities due to the availability of land and lower land values.

4.5. Population Trends

The total population of the City of Hobart at the 1996 Census¹⁵ was 46 700 people. It has essentially been static since the late 1970's - losing 250 persons from 1981 to 1994, but with a loss of population of about 330 (0.7%) from 1994 to 1995.

The occupancy rate within Hobart fell from 2.15 in 1991 to 1.97 in 1996¹⁶. It is therefore logical that the number of dwellings must have risen to maintain a static population. These new dwellings are reflected through such developments as the Salamanca Quarry & Mews, Wapping and the North Hobart 'Better Cities' site in Federal Street for example.

4.6. Role of the Study Area for Business

The role of the Case Study Area has only been briefly analysed in two recent planning studies - the *Central Area Strategy Plan 1991*¹⁷ (CASP) and the *Draft Commercial Centres Strategy 1997*¹⁸.

The *Draft Commercial Centres Strategy* report outlined the land use pattern of the area as one of extensive display areas and parking, creating a wide-spaced distribution of businesses. It reports that the area serves as a necessary 'back end' service area for the CBD and provides a lower rent area for many businesses that need to be close to the CBD but do not need a prime location.

Similarly, the CASP report stated that the frame district has a definite role to fulfil as the primary location of those activities of an industrial, or similar nature which are still essential to the central area and the residential base.

¹⁵ Australian Bureau of Statistics, "Hobart .. A Social Atlas", Commonwealth of Australia, Canberra, 1997.

¹⁶ Australian Bureau of Statistics, "Hobart Suburbs 1996", Commonwealth of Australia, Canberra, 1997

¹⁷ Hobart City Council, Central Area Strategy Plan, 1991.

¹⁸ C R Attwater, V J Thorp & J Douglas, Commercial Centres Strategy Development, HCC, 1997.

Similarly, the CASP report stated that the frame district has a definite role to fulfil as the primary location of those activities of an industrial, or similar nature which are still essential to the central area and the residential base.

Other, smaller central service areas subservient to their outer centres such as Derwent Park, Mornington and Cambridge (see figure 4.6) are also apparent within the region. However these are further removed from the CBD and it is likely that they have a more local catchment than that of the case study area which also has a regional role.

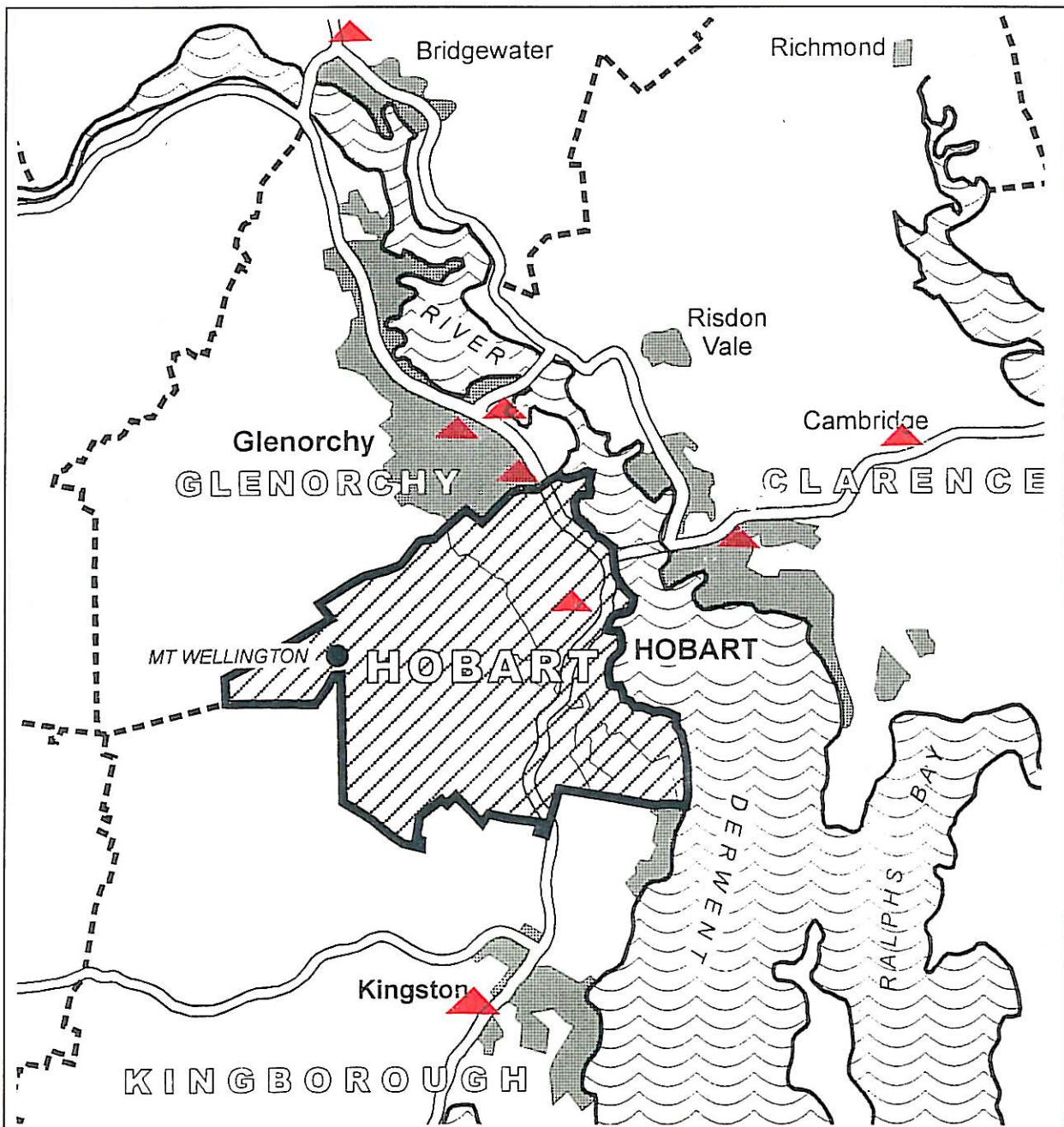


Figure 4.6 - Areas with Central Service Characteristics within Greater Hobart

4.7. Role of the Case Study Area for Residential

Although not obvious at first, residential uses make up a considerable proportion of land use within the study area. Specifically, Trinity Hill forms an inner-city residential

Contemporary thinking on inner city areas has focused on residential development and gentrification, in part to redress the effects of urban sprawl occurring in the suburbs but also to instil life into the city. In Hobart, much of this has centred around the more 'prime' locations of the inner city such as Salamanca and Wapping rather than the areas of lesser amenity such as the case study area.

Unlike larger cities, Hobart is easily accessible by car and consequently possesses an abundance of suburban accommodation within ten to twenty minutes of the CBD. As this is the case, pressure for inner-city land is reduced. This coupled with Hobart's stagnant or in fact slightly declining population indicates that it is unlikely that the development demands for residential development within the case study area will rise significantly in the short to medium term.

4.8. Conclusion

The case study area has evolved, from what was prior to 1900 principally a residential area, to a mixed use area servicing the Hobart CBD. Many similarities to the theories discussed in Chapter 2, those of Preston in particular, can be recognised.

Characteristics of a 'transition zone' are apparent within the case study area with residential deterioration and establishment of central service type uses. The introduction of new technologies such as the motor car has seen suburbanisation and also decentralisation with the growth of Glenorchy, Clarence and Kingborough.

The above factors combined with Hobart's static or declining population have reduced pressure for the outward expansion of the CBD.

Although it is anticipated that the later chapters, examining the existing land use and built form and recent planning, will indicate that the case study area has a definite role to provide necessary commercial, wholesaling and light industrial uses to serve the CBD, it is unlikely that the area will experience significant pressure for development in the short to medium term if the trend of the last ten years continues.

The next chapter analyses the existing policy direction of the current planning controls under the City of Hobart Planning Scheme 1982.

5. Planning Controls for the Study Area Under CHPS 1982

5.1. Introduction

Previous chapters have provided background information to set the scene for the case study with an examination of its evolution and role within the region in light of planning theory on 'frame' areas.

To understand the operational characteristics of the case study area, it is necessary to establish development trends under the current planning framework and impressions of occupants of the area. To do this though, it is first important to examine the current planning controls in detail.

This chapter provides technical analysis of the policy framework and planning controls for the study area which have directed development since 1984. It provides interpretation as to the consistency and combined effect of both the objectives and numeric schedules of the planning scheme.

The Objectives of the Resource Management and Planning System of Tasmania are also introduced.

5.2. City of Hobart Planning Scheme 1982

Development within the case study area is subject to the provisions of *the City of Hobart Planning Scheme 1982*. The Planning Scheme controls development in a number of ways however its structure is based on a series of *Zone Objectives*, *Statements of Desired Future Character* and *Schedules*.

The *Statements of Desired Future Character* provide a description of the intent and envisaged directions of each of the *Precincts*. In theory, these statements should be supported by the *Schedules* of the Planning Scheme and other Council programs such as civic works and on-street parking management.

There are particular *Schedules* which direct development within the study area most significantly:- The *Use Schedule A* lists the status of each *use group* within each *Precinct* (either *permitted*, *discretionary*, or *prohibited*). The *Density Schedule D* indicates *basic plot ratios* and *maximum plot ratios* (attainable by the use of acceptable bonus features) and *Schedule E* outlines objectives for traffic, access and parking in each zone. Additionally, the *Heritage Schedule F* lists sites and areas of cultural heritage significance within the study area and has provisions for their protection. The roles of each of these elements of the Planning Scheme are expanded below and then considered in their entirety for each precinct.

5.3. Zone Objectives & Desired Future Character Statements

The Planning Scheme classifies a number of *Zones* and *Precincts* within the study area (see Figure 5.3). Each *Zone* has broad land use *objectives* and each *Precinct* a *Statement of Desired Future Character* providing more detailed guidance as to the desired development for various areas. These Objectives and *Statements of Desired Future Character* are provided in Appendix 5.3 to this report.

A consistent theme can be seen in most *Statements of Desired Future Character* with reference to use, urban form/density, movement and in some cases civic works. The *Schedules* for each *Precinct* should be consistent with the directions of these *Statements of Desired Future Character*.

5.4. Land Use

Schedule A defines the land use types and their status under the relevant zones. The preferred uses for each zone can be interpreted as those marked *permitted*.

Summaries of the consistency between the status of uses and intentions of the *Statements of Desired Future Character* for each *Precinct* are discussed later in this chapter.

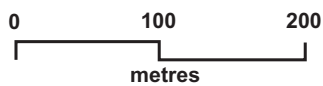
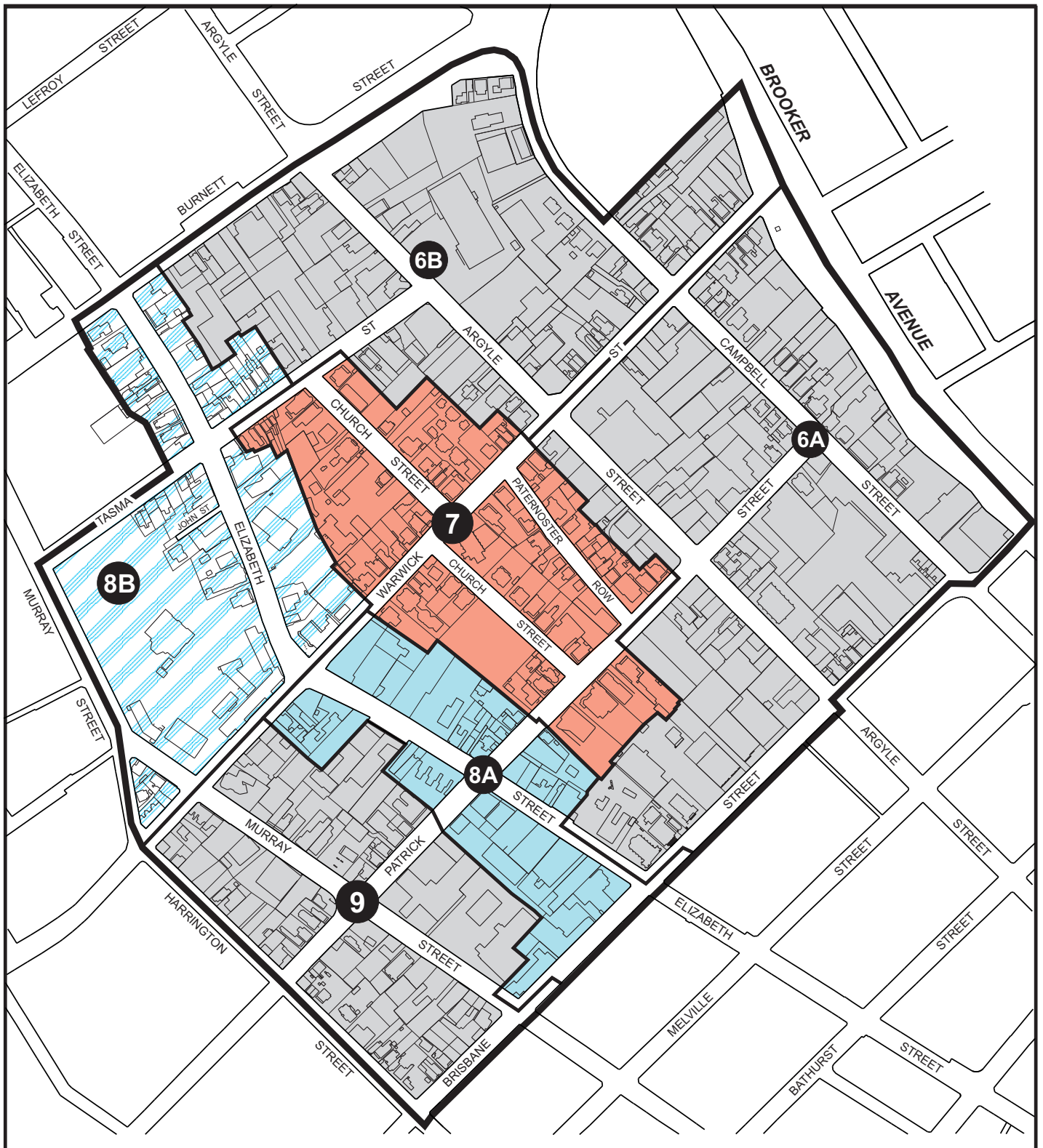
The use classifications for each zone are listed in Table 5.4 below. The *permitted* uses are highlighted.







Table 5.4 - Use Group Status by Zoning for the Study Area

Use Group	Central Commercial & Administrative - Precinct 8A				Use Types
	Central Service - Precincts 6A, 6B & 9			Commercial & Residential - Precinct 8B	
			Residential 1 - Precinct 7		
I	P	D	P	P	the development of land for a house, ancillary flat, home occupation
II	P	D	P	D	the development of land for a flat, elderly persons unit
III	P	D	D	D	the development of land for a multiple dwelling
IV	D	D	D	D	the development of land for a domestic business
V	P	D	P	D	the development of land for consulting rooms, a community centre, place of public worship
VI	D	X	D	D	the development of land for a hospital, a welfare institution
VII	D	D	D	D	the development of land for an educational establishment
VIII	P	D	P	X	the development of land for an office
IX	P	D	P	X	the development of land for a shop, take-away food shop, a bank
X	P	D	D	X	the development of land for a holiday unit, a hotel, a motel, a club, a cinema, a theatre, a restaurant, a discotheque, bed and breakfast accommodation.
XI	D	D	D	D	the development of land for active recreation
XII	D	D	D	X	the development of land for an amusement machine centre, a health studio
XIII	P	P	P	X	the development of land for a service industry, a showroom, car hire premises.
XIV	D	P	X	X	the development of land for a light industry, a warehouse, a saleyard.
XV	X	D	X	X	the development of land for a transport depot, a timber yard, an industry
XVI	P	D	P	D	the development of land for a local shop
XVII	P	P	P	P	the development of land for passive recreation.

(Source: Schedule A, City of Hobart Planning Scheme 1982)

Note: The use terms are defined within Schedule A of the Planning Scheme.



- | | | |
|--|---|---|
| Central Service Zone |  | Precinct No. 9 |
| Central Commercial & Administrative Zone |  | Precinct Boundary  |
| Commercial & Residential Zone |  | Study Area Boundary  |
| Residential 1 Zone |  | |

**ZONES & PRECINCTS IN THE CASE STUDY AREA
UNDER CITY OF HOBART PLANNING SCHEME 1982**

5.3

Generally, encouragement of mixed land use can be seen from this schedule, with a large number of *permitted* and *discretionary* uses in all but the residentially zoned Precinct 7.

The *Central Commercial and Administrative* zoning, with mixed land use objectives, has a similar range of use status to the *Commercial & Residential* zoning. Both have a large proportion of *permitted* use groups and encourage retail, office and residential uses. The only prominent difference is the prohibition of *light industries, warehouses and saleyards* in the *Commercial and Residential Zone*. The emphasis on providing general non-residential service uses in the *Central Service Zone* is also reflected in the *Use Schedule* for *Precincts 6A, 6B & 9*. Here *service industries, showrooms, light industries* and *warehouses* are *permitted* uses.

5.5. Development Density

Schedule B of the *Planing Scheme* provides density controls for development within each Precinct (see Table 5.5). *Basic plot ratio* indicates the preferred densities of built form within each *Precinct*. *Maximum plot ratio* provides the facility (at Councils discretion) for developments to expand beyond the basic plot ratio where the development provides facilities to benefit the city. *Principle 8* of the *Planning Scheme* states that these facilities may include:- residential uses in appropriate non-residential Precincts, public facilities such as plazas or child care, cultural heritage conservation or the use of special materials or design features to enhance the surrounding environment.

Table 5.5 - Plot Ratio by Precinct for the Study Area

Precinct	8A	6A	9	6B	8B	7
Basic plot Ratio	2.25	2.25	2.25	1.2	0.9	0.5
Max. plot ratio	3.0	3.0	3.0	1.6	1.2	0.5
Dwelling Unit Factor	none	none	120	120	120	160

(Source: Schedule B, City of Hobart Planing Scheme 1982)

The density controls for each precinct vary significantly throughout the study area. The Central Service zoned Precincts 6A and 9 and the Central Commercial and Administrative zoned Precinct 8A all have maximum plot ratios of 3.0. This encourages a significant increase from the existing density. Other Precincts have reduced density controls down to 0.5 for the Residential 1 zoned Precinct 7.

5.6. Traffic, Access and Parking

Schedule E outlines objectives for traffic, access and parking. These policy objectives indicate the preferred management of movement, both vehicular and pedestrian, and parking within each zone.

Requirements for car parking under this *Schedule* are related to the use definitions and are based on their expected car parking generation. These provisions are included in Appendix 5.6 to this report.

The Planning Scheme provides discretion to reduce or waive car parking requirements if it is considered that their provision will be detrimental to cultural heritage values. Additionally, in the residentially zoned Precinct 7, car parking may also be waived if it is considered that its provision would detract from residential amenity.

Cash-in-lieu may be accepted for any development in Use Groups IV - XVI inclusive (see Appendix 5.4) for all but the residential precinct within this study area. The current compensation figure for cash-in-lieu is \$2500 per space.

In light of the above, it is possible that the provision of on site car parking could be waived within the study area on grounds variously of heritage, residential amenity or through provision of cash-in-lieu.

On street car parking management is outside the jurisdiction of the Planning Scheme however Council does enforce on street car parking restrictions within the case study area. Figure 5.6 demonstrates the existing car parking management regime which varies between restricted residential parking areas and metered parking from thirty minutes to four hours. On average, due to finite resourcing, Council parking staff only patrol the Case Study Area one day a week.¹⁹ It is likely that this lack of enforcement, drastically reduces the effectiveness of these restrictions.

5.7. Heritage

Principle 20 of the Planning Scheme states that areas shown as *Heritage Areas* and places listed on the Heritage Register (*Appendix 1 of Schedule F*), shall be conserved. In addition *Clauses F.3.2* and *F.4.3* require retention of any listed place or existing building, or structure within a *Heritage Area* unless:-

- i) it clearly detracts from the cultural significance of the Area, or*
- ii) there are overriding environmental, economic or practical reasons for its removal either wholly or in part.*

Areas adjacent to *Heritage Areas* and listed properties must also under *Clauses F.3.3* and *F.4.4*:-

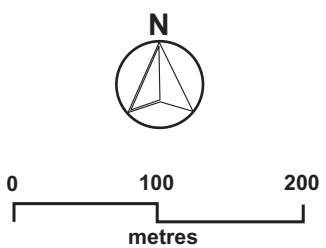
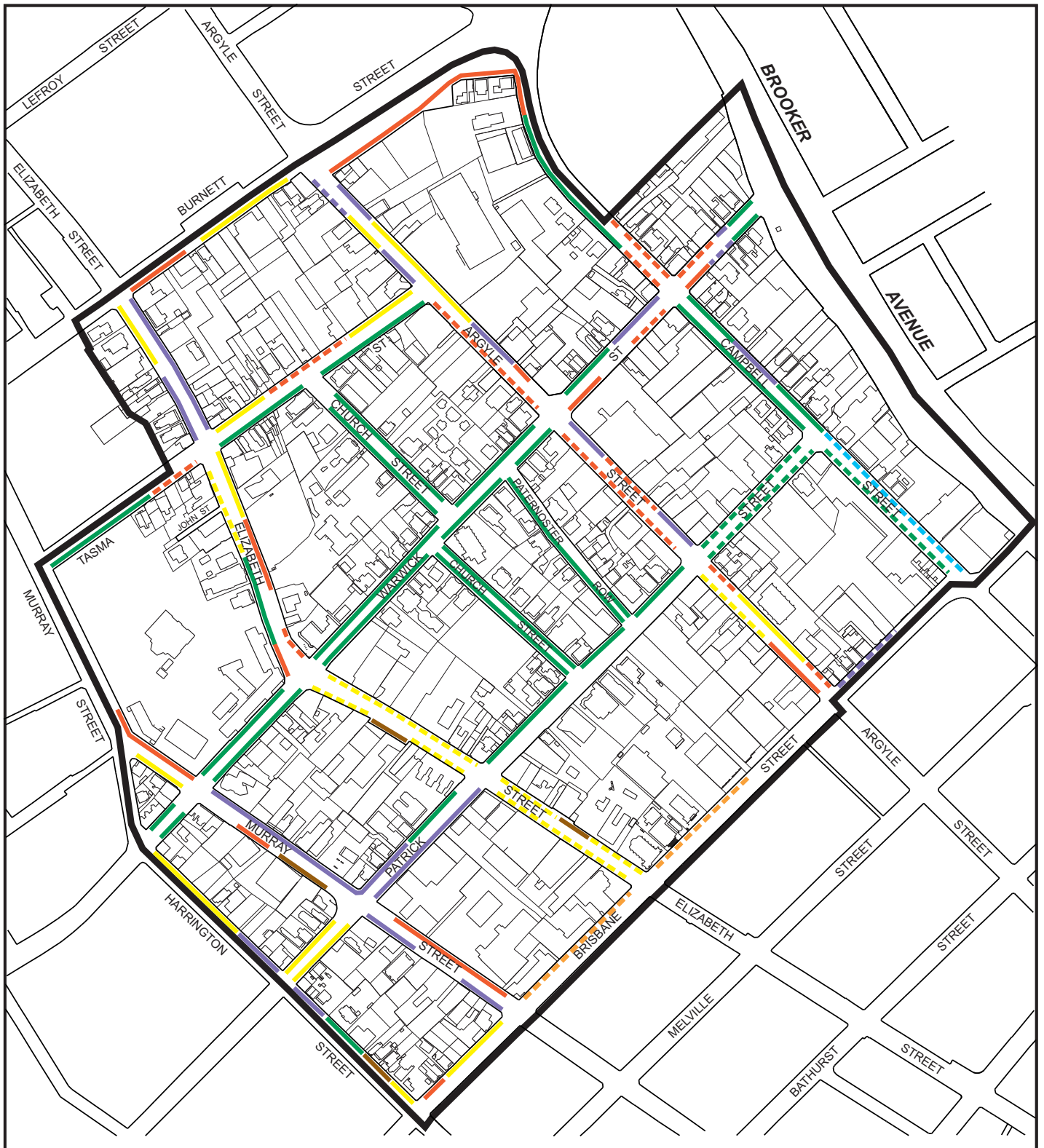
...be in keeping with those characteristics of the Area or place which contribute to its cultural significance.

F.3.4 requires any new development within a *Heritage Area* to be:-

...in harmony with the height, bulk, setbacks, material, colours and finishes of existing buildings...

The study area has 127 heritage listed properties and part or all of *Heritage Areas* 13 and 12 contained within it. Given this, the effective coverage of heritage controls, including properties adjacent to both heritage areas and listed properties, is very substantial. Figure 5.7 displays the heritage listed properties and the effective coverage of heritage controls within the study area at approximately 70%.

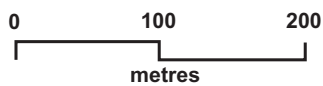
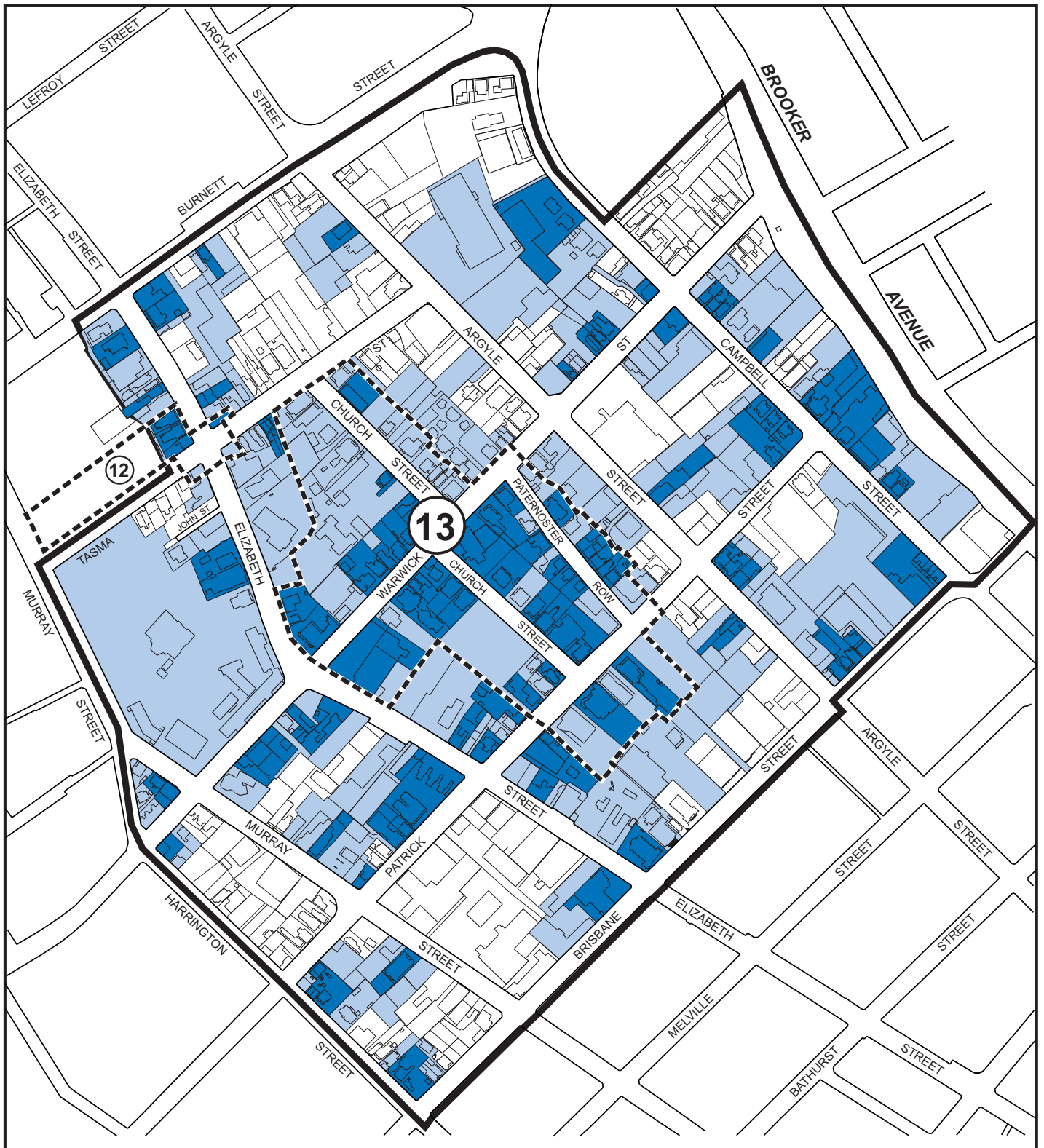
¹⁹ (In the six months preceding October 1998, 26 full day patrols were conducted of the case study area), Source Hobart City Council, October 1998.



Boundary of case study area		1 hour restrictions	
5 - 15 minute restrictions		1 hour meters	
No standing		2 hour resident restrictions	
Loading zone		2 hour meters	
30 minute restrictions		3 hour meters	
30 minute meters		4 hour meters	

**ON-STREET CAR PARKING RESTRICTIONS
WITHIN THE CASE STUDY AREA**

5.6



Heritage listed properties



Extended coverage of heritage controls over non heritage sites



Heritage area boundary



Heritage area number



Study Area Boundary



**HERITAGE AREAS, HERITAGE LISTED PROPERTIES
& EFFECTIVE COVERAGE OF HERITAGE CONTROLS
FOR CASE STUDY AREA**

5.7

These heritage provisions and their extensive coverage in the case study area may reduce the development potential of a large proportion of the properties currently indicated through the plot ratio provisions. This is mainly due to the intention to conserve the existing character and built form.

5.8. Signs

Signage within the study area is controlled under *Schedule G* of the Planning Scheme. These provisions are generally similar for all but the residential precinct within the study area and reflect its existing and intended commercial nature. Quite extensive signage is allowed with *pole signs*, *wall signs* and *roof signs* deemed *permitted*.

This Schedule also provides fairly comprehensive principles to prevent cluttering, obstruction, repetition of message and poorly placed signs.

5.9. Review & Comments of planning controls for each Precinct.

It is predominantly the contents of the above schedules which together direct development within individual *Precincts* within the study area. The combined effect and consistency of these controls for each *Precinct*, in relation to the individual *Statements of Desired Future Character*, are considered below.

5.9.1. Argyle Precincts - 6A and 6B

5.9.1.1. Use

The *Objective* of the *Central Service Zone* intends its operation as a mixed use ‘fringe’ area providing supporting uses to the Hobart CBD. The same *Statement of Desired Future Character* guides development in both *Precincts 6A* and *6B*. It encourages consolidation of activities servicing the central area and provides for other uses which require a central metropolitan location but are not suited to the CBD such as small offices, retailing, wholesaling, light industry and automotive uses.

The preferred use classes are consistent with the above as *service industries*, *showrooms*, *car hire premises*, *light industries*, *warehouses* and *saleyards* all *permitted uses*. However, as all other uses, apart from *hospitals* and *welfare institutions*, are *discretionary*, the scheme effectively allows nearly any change of use. This is especially the case as the *Statement of Desired Future Character* is not specific in its direction of uses.

5.9.1.2. Built Form/ Streetscape

Medium density development is intended in both of these precincts however the density controls encourage a higher density of development in *6A*, with a *basic plot ratio* of 2.25, than *6B* with a *basic plot ratio* of 0.9. The *Statement of Desired Future Character* states that this prescribed difference is to reflect the transition from the high density of the central area to the lesser density of the inner city residential areas.

The progressive reduction of excess vacant and under-utilised land is intended by the *Statement of Desired Future Character* along with upgrading of the urban streetscape by the recycling of existing buildings and provision of high quality landscaped private open space.

It could be argued that the identification of *saleyards* as *permitted* uses is inconsistent with this as these uses are characterised by extensive paved open areas, smaller lot coverages and large front boundary setbacks. In any case a misfit between these *permitted* uses and the prescribed *plot ratios* of *Schedule B* can be seen. These discrepancies are particularly prominent in Precinct 6A as it is highly unlikely that these *permitted* uses would ever utilise the density potential.

The *Siting and Landscaping Schedule D* provides the potential to encourage landscape upgrading. In particular, *Clause D.5.1* refers to *Principle 12* which allows requirements for upgrading and maintenance of landscaping and planting, in the context of the *Statement of Desired Future Character*, to be imposed as conditions of approval on any change of use or new development. No preferred planting solutions are specified in the Planning Scheme to show how this planting is to be logically administered across a series of lots.

5.9.1.3.Movement

In contrast to the *Schedule E* provisions for the *Central Commercial and Administrative Zone*, the *Central Service Zone* has no direction for parking. Instead these directions focus primarily on movement.

High traffic volumes are recognised as an integral characteristic in this Zone. The intent to encourage a higher quality streetscape could be seen as an attempt to encourage pedestrian movement however this is not specifically stated.

There is no mention of the intended parking regime within the area.

5.9.2. Murray Precinct - 9

5.9.2.1.Use

Like *Precincts 6A & 6B* the *Murray Precinct 9* is also zoned *Central Service*. Its *Statement of Desired Future Character* encourages the intensification of a diversity of wholesaling, light industrial and automotive businesses. This pre *Environmental Pollution Control Act 1994* (EMPCA) statement also requires that this intensification does not occur at the expense of the amenity of existing residential uses. Such a requirement is now ensured under EMPCA which requires that any land use must not cause an 'environmental nuisance'. It is not however stated that residences must not be displaced.

The use controls are consistent with those for 6A and 6B.

5.9.2.2. Built Form/ Streetscape

The density controls allow quite a high density with a *basic plot ratio* of 2.25 and *maximum* of 3.0 . This figure, like Precinct 6A (discussed above), seems incompatible with the *permitted* uses. The intent to protect the residential amenity is reinforced with reduced height and scale on areas adjacent to residential development.

The *Statement of Desired Future Character* intends onsite landscaping to be encouraged where possible to complement civic works programmes on public land. The issues of onsite landscaping requirements as discussed for *Precincts 6A & 6B* above are also applicable however Council has no civic works programmes for this precinct to date.

5.9.2.3. Movement

Movement and parking controls are the same as for Precincts 6A & 6B as indicated above.

5.9.3. Elizabeth Street - Precinct 8A

5.9.3.1. Use

The *Statement of Desired Future Character* for *Precinct 8A* has a mixed use commercial and residential aim. It intends development to maintain its existing function of retail, wholesale and office uses whilst also recognising the importance of the residential use component. The *Use Schedule* provides little guidance as to the most appropriate use(s) as 10 of the 17 use groups are *permitted* and a further 6 *discretionary*. Uses which conflict with the *Zone Objective* and *Statement of Desired Future Character*, such as *light industries, saleyards* and *warehouses* are appropriately *prohibited*. The status of uses, provided in *Schedule A* of the *Planning Scheme*, support the *Statement of Desired Future Character* for the *Precinct*. There is however, no facility to prevent the displacement of other *permitted* uses such as residences.

5.9.3.2. Built Form/ Streetscape

The retention and maintenance of the linear image of Elizabeth Street is required for development within this *Precinct* by the *Statement of Desired Future Character*. The *Siting and Density Schedule D* of the Scheme is consistent with this and requires setbacks within this *Zone* to satisfy these intentions.

The *basic plot ratio* of 2.25 and *maximum plot ratio* of 3.0 prescribed in *Schedule B* allow quite a high level of built density in the *Precinct*. This density provision could be appropriate and consistent with both the intentions of the *Statement of Desired Future Character* and most of the preferred uses if sufficient demand for land was apparent. It is however unlikely that several *houses* or a *car hire premises* would ever utilise this density potential.

5.9.3.3. Movement

The *Traffic, Access and Parking Schedule E* of the *Planning Scheme* encourages pedestrian movement and short term on street and public car parking within this

precinct. This is consistent with the *Statement of Desired Future Character's* intention to provide for retail uses within the precinct. Council's on street parking regime (see figure 5.8) supports these provisions with 1 hour kerbside parking metres along both sides of Elizabeth Street and 30 minute parking restrictions along the eastern side of Patrick Street. The Planning Scheme does not however identify sites for public car parking. It takes a traditional 'statutory' approach to the area and does not include pro-active elements to support or facilitate these objectives.

5.9.4. Elizabeth Street - Precinct 8B

5.9.4.1. Use

This Precinct is zoned *Commercial and Residential*. Its *Statement of Desired Future Character* encourages its evolution as a retail and community service area between the adjacent residential precincts of Trinity Hill and West Hobart. The *Use Schedule* encourages *houses, flats, offices, shops, service industries and showrooms* as permitted uses. *Light industries, warehouses and saleyards* are prohibited.

5.9.4.2. Built Form/Streetscape

A medium density is provided for land in this precinct with a *basic plot ratio* of 0.9 and *maximum plot ratio* of 1.2. Lesser density than development allowable in *Precinct 8A* to the south along Elizabeth Street is intended. This is compatible with densities of any adjacent residential properties.

5.9.4.3. Movement

No reference is made to traffic movement however commuter parking is stated as undesirable. Council's on street parking regime is consistent with these principles with provision of residential parking and meter controls in this precinct.

5.9.5. Trinity Hill - Precinct 7

5.9.5.1. Use

This *Precinct* is within the *Residential 1 Zone* which aims to sustain and enhance the character and amenity of established residential areas. The intent of the *Statement of Desired Future Character* is consistent with this objective. Maintenance of the function of this *Precinct* as an inner urban residential area is supported by the *Use Schedule* which prohibits intrusion of offices, retailing and industries etc.

5.9.5.2. Built form/ Streetscape

Development consistent with the residential scale is encouraged by *the maximum plot ratio* of 0.5. There is no provision for *bonus plot ratio* within this precinct, however where the plot ratio prevents a residential use, which pre-existed the introduction of the Planning Scheme in 1991, from expanding, *Clause B.4.3* allows an extension up to 10% or 20m² (which ever is greater) over the maximum plot ratio.

Setbacks and house and garden characteristics are promoted by the *Siting and Landscaping Schedule D*.

The hillside topography and presence of the church are recognised as important design considerations.

5.9.5.3.Movement

Through traffic is discouraged as is commuter car parking which is reinforced by Council's on street car parking regime. This provides 1 hour and half hour kerbside parking restrictions within the Precinct. Residents have parking permits to exempt them from these restrictions.

The impact of through traffic aims to be minimised by restrictions on rear site access to properties fronting Elizabeth and Argyle Streets from Church Street and Paternoster Row. Regardless, rear access to Elizabeth Street is limited by topography.

5.10. The Resource Management and Planning System of Tasmania

Although not in operation when the City of Hobart Planning Scheme 1982 was prepared and came into operation in 1991, the Resource Management and Planning System of Tasmania (RMPST) is now in place. The objectives of this system are essentially based on sustainability. These objectives are set out in Schedule 1 of Land Use Planning and Approvals Act 1993 (see Appendix 5.10).

Principles of natural resource management are central to this system. They demand sound strategic planning and explicitly incorporate economic, environmental, cultural and social factors into the planning process.

For this case study area these objectives would mainly relate to environmental performance and economic and social sustainability.

5.11. Conclusion

The City of Hobart Planning Scheme 1982 recognises that light industrial, warehousing, saleyards, showrooms, service and wholesaling type uses provide an important support role to the CBD. This is reflected through its Central Service zoning, much of which is located within the study area. Its intention is to provide for a changing diversity of general non-residential uses which require a central metropolitan location but are not suited to the CBD.

The presence of the Central Service zoning is the focus of this case study however there are two other character areas within the study area which are related and effected by this adjacent environment. Essentially these relate to the retail, office and residential type areas along Elizabeth Street, occupied by Precincts 8A and 8B and, the residential enclave of Trinity Hill- Precinct 7.

The examination of the Planning provisions on a precinct basis above establishes that generally the Planning Scheme provisions show consistency between the *Zone Objectives*, *Statements of Desired Future Character* and *Schedules* yet there are areas of less coherence.

The *Central Service Zoning* provides flexibility of use and built form as only one use group is prohibited and plot ratio provisions are generally high. The progressive reduction of vacant and under utilised land is encouraged, although it could be argued that some of the permitted uses such as saleyards may encourage under utilisation of land and degradation of the urban streetscape. This is especially the case if demolition is involved. The only real constraint to demolition in the area relates to considerations of cultural heritage value and this is not applicable to all sites.

The *Siting and Landscaping Schedule D* provides the potential to encourage landscape upgrading to be imposed as conditions of approval on any change of use or new development, but no preferred planting solutions are specified to ensure logical administration or a cohesive approach across a series of lots. Moreover, Council has had no civic works programmes within the study area for street upgrading in support of the *Statements of Desired Future Character*.

The *Statement of Desired Future Character* for Precinct 9 mentions that new uses must not detract from the amenity of existing residential properties and alludes to the fact that these are a valuable component within the area. Nevertheless, residential uses are *discretionary* and there is no provision to prevent their displacement.

The *plot ratio* provisions of most Precincts within the case study area promote significant increases in density. These provisions are likely to conflict with the extensive coverage of the heritage controls which aim to conserve the existing character and built form.

6. Existing Characteristics of the Case Study Area.

6.1. Introduction

The previous chapter examined the current planning framework for the study area and established that the City of Hobart Planning Scheme 1982 has specific provision for central service type uses within it.

This chapter briefly examines the basic characteristics of the case study area in terms of existing land use, building stock, form, density and traffic movements.

6.2. Existing Characteristics of the Study Area

Today the case study area is characterised by extensive display areas, parking and a predominantly low density of built form. Business uses within this study area generally serve the City of Hobart (small offices, shops, hardware stores and used car yards), although a number of uses with a regional role are also apparent (specialist wholesalers, larger offices and new car yards and showrooms). It is anticipated that the majority of these have a common requirement to be close to the CBD but do not need a prime location.

The size, character and age of buildings within the case study area varies significantly. This reflects the characteristics of a transitional or 'frame' area described in Chapter 2, where central service type uses encroach on inner residential areas with lower land values.

The associated buildings of the dominant central service uses with large floor space such as warehouses, contrast the small, two storey residential scale buildings. These smaller buildings either typically retain their residential function, or have been taken over by offices. Paved open areas, associated with on site car parking and saleyards, are also common within the area.

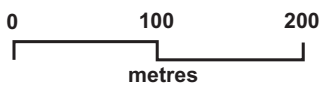
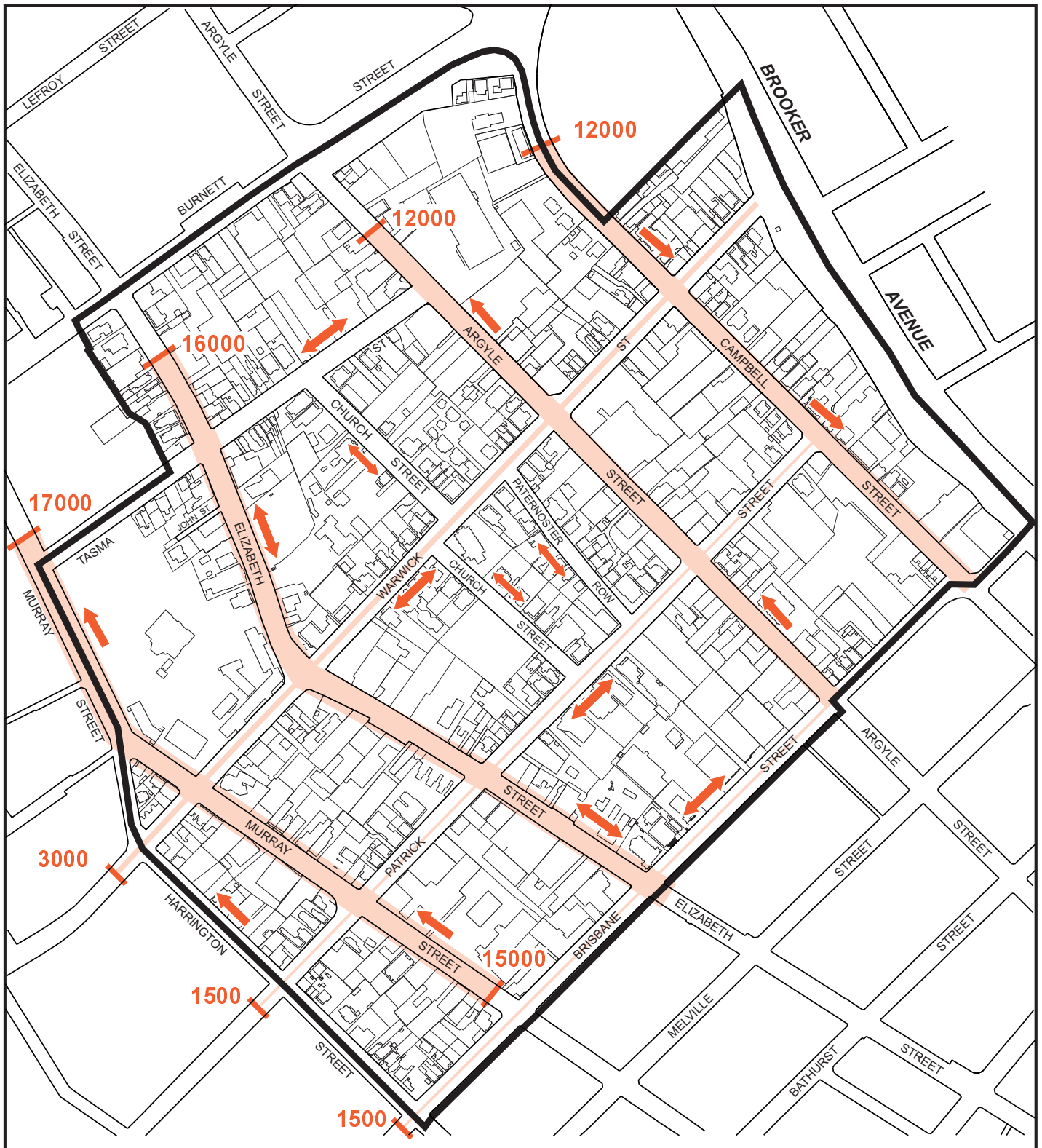
6.3. Traffic Movement

The streets of the case study area are generally wide and arranged on a grid pattern. This street layout displays a hierarchy with three definite categories. The first being the major through roads which run north- south, the second the cross streets of Patrick, Tasma, Warwick and Brisbane Streets and the third being the internal streets of Trinity Hill. Figure 6.3 shows traffic volume figures to demonstrate this pattern.

6.4. Current Land Use of the Area

Current Hobart City Council rates information was used to identify the existing land use distribution within the case study area. This data was reclassified on a 'best fit' basis to the use groupings of the City of Hobart Planning Scheme 1982.

This research identifies a substantial mix of uses in all but the Residentially zoned *Precinct 7*, including 30-37% of sites in residential uses (*Use groups I - IV*) in the *Central Service* zoned *Precincts 6A, 6B and 9* (see Table 6.3). *The Trinity Hill Precinct 7* displays 89% of sites in residential use.



- Boundary of case study area
- Location and count of traffic volume (vehicles per day) 15000
- Graphic representation of vehicle volumes
- Direction of traffic flow

TRAFFIC VOLUMES

6.3

Table 6.4 - Existing Land Use of each Precinct by Use Group

Zone	Res1	Central Service			Com & Admin	Com & Res
		7	6A	6B		
Land Use Group	7	6A	6B	9	8A	8B
I- the development of land for a house, ancillary flat, home occupation	50%	24%	28%	30%	10%	24%
II - flat, elderly persons unit	38%	6%	9%	7%	19%	17%
III - multiple dwelling	0%	0%	0%	0%	0%	2%
IV - domestic business	0%	0%	0%	0%	0%	0%
V - consulting rooms, a community centre, place of public worship	1%	3%	0%	0%	0%	2%
VI - a hospital, a welfare institution	1%	0%	0%	1%	0%	0%
VII - educational establishment	0%	0%	0%	0%	0%	2%
VIII - office	4%	14%	12%	11%	27%	9%
IX - shop, take-away food shop, a bank	0%	6%	5%	20%	23%	24%
X - holiday unit, a hotel, a motel, a club, a cinema, a theatre, a restaurant, a discotheque, bed and breakfast accommodation.	1%	3%	1%	1%	0%	11%
XIII - service industry, a showroom, car hire premises.	0%	12%	24%	5%	4%	0%
XIV - a light industry, a warehouse, a saleyard.	3%	28%	18%	25%	15%	7%
XV - transport depot, a timber yard, an industry	1%	4%	4%	0%	2%	2%

Key	Permitted uses	Discretionary uses	Prohibited uses
-----	----------------	--------------------	-----------------

Source : Compiled by Author from HCC rates records 1998.

Use group XIV - *light industries, warehouses* (Figure 6.4.2) and *saleyards* (Figure 6.4.1) also occupy a large proportion of land in all three *Central Service Precincts*. *Offices, shops* and residential accommodation occupy a large portion of both *Precincts 8A and 8B*.



Figure 6.4.1 - car yards are common along Argyle Street. This one displays the typical characteristics of these uses with large open display spaces, vehicles (product) visible from the street and extensive signage.



Figure 6.4.2 - An example of a commercial activity in the frame district characterised by a large warehouse with a retail component and easy access for heavy vehicle movements.



Figure 6.4.3 - An example of a building within Precinct 9 of the Central Service Zone. Residential in nature, now used for offices.



Figure 6.4.4 - The characteristic uses of the Residentially Zoned Precinct 7 and the Central Commercial and Administratively Zoned Precinct 8A clearly define the zone boundary in this picture.

Figures 6.4.3 to 6.4.8 reflect the existing character within the study area. The residential scale of many buildings is apparent however large traffic volumes and effects from the cohabitation of the area with businesses, means that the level of residential amenity is generally low.



Figure 6.4.5 - Paternoster Row within the residentially zoned Trinity Hill Precinct. An inner city residential enclave with historic cottages is retained inside this central service area.



Figure 6.4.6 - Houses along Campbell Street within Precinct 6B are retained adjacent to larger scale commercial uses. Large traffic flows on such major through streets reduce residential amenity.



Figure 6.4.7 - These properties within Precinct 9 have changed from houses to an office and a shop. Both have replaced the front gardens with off street parking provision. The distant example now also has a shop front.



Figure 6.4.8 - A house for sale with a Campbell Street frontage within Precinct 6A. The flexible use controls of the Central Service Zone encourage displacement of residential uses.

6.5. Number of Storeys

Field work within the study area established the number of storeys of each building in early July 1998. This information is displayed in figure 6.5. which shows that the majority of buildings within the study area are either one or two stories. Three and four storey buildings amount to ten and are centred around Elizabeth Street.

Table 6.5 below shows the percentage breakdown of the number of storeys of buildings within the study area per precinct.

Table 6.5 Percentage Breakdown - Number Storeys of Buildings per Precinct.

Precinct	1 Storey	2 Storeys	3 Storeys	4 Storeys
6A	51	52	0	0
6B	65	26	0	0
7	44	45	0	0
8A	17	25	4	1
8B	18	33	3	1
9	41	29	1	0
Study Area Totals	51%	46%	2%	1%

Source: Authors field work July 1998.

This general character of one to two storey buildings is consistent with the typical character of central service areas where the associated business uses usually require floor area at ground level. Additionally, the availability of land and relatively low land prices do not necessitate any higher level of land utilisation.

6.6. Plot Ratio

To complement these results, density was identified through an estimation of the site coverage of the building footprint from aerial photographs and Council plans, and multiplying this by the number of storeys on site (see figure 6.6). This method does not provide a high degree of precision but it is considered accurate to within a maximum variation of 20%. This is adequate for the purposes of this study.

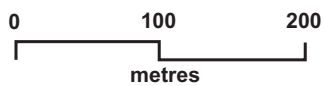
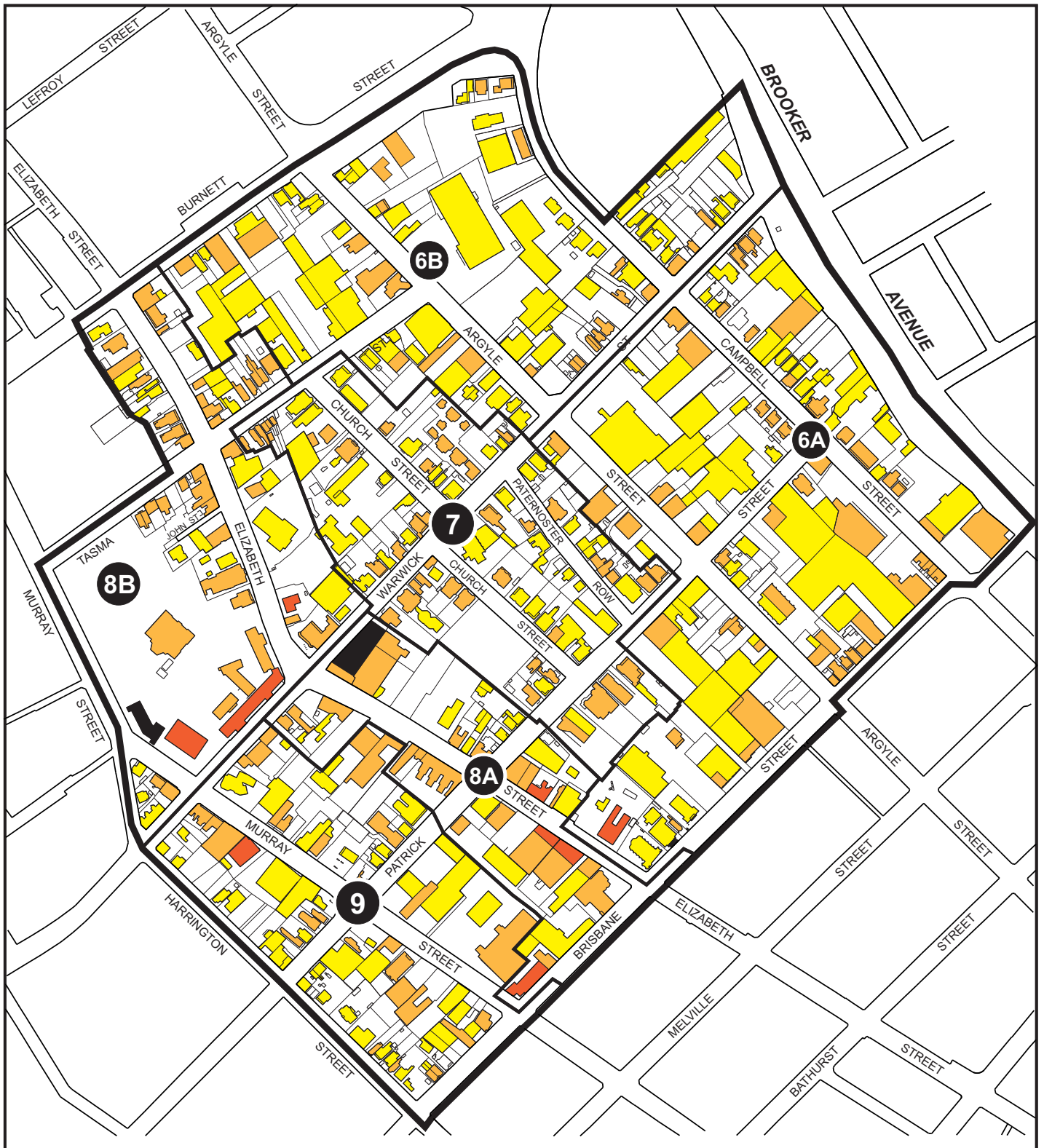
A large portion of sites within the study area have a plot ratio less than 1.0 (see figure 6.6.1). Only three properties have a plot ratio greater than 2. Table 6.6 summarises the range of density for each precinct.

Table 6.6 Percentage Breakdown within each Plot Ratio Range per Precinct

Precinct	0-0.2	0.2 -0.5	0.5 - 1	1.0 - 1.5	1.5 - 2	2.0 - 3	3+
7	4%	37%	53%	6%	0%	0%	0%
6A	19%	21%	46%	13%	1%	0%	0%
6B	17%	32%	44%	6%	0%	0%	0%
8A	10%	2%	31%	38%	12%	5%	2%
8B	7%	9%	58%	24%	2%	0%	0%
9	13%	26%	56%	6%	0%	0%	0%

Source: Authors field work July 1998.

On observation of the case study area and through this plot ratio and number of storeys information, some distinct areas of similar building stock character are apparent (see figure 6.6.2). The area on both sides of Argyle Street and the western side of Campbell Street is characterised by properties with low

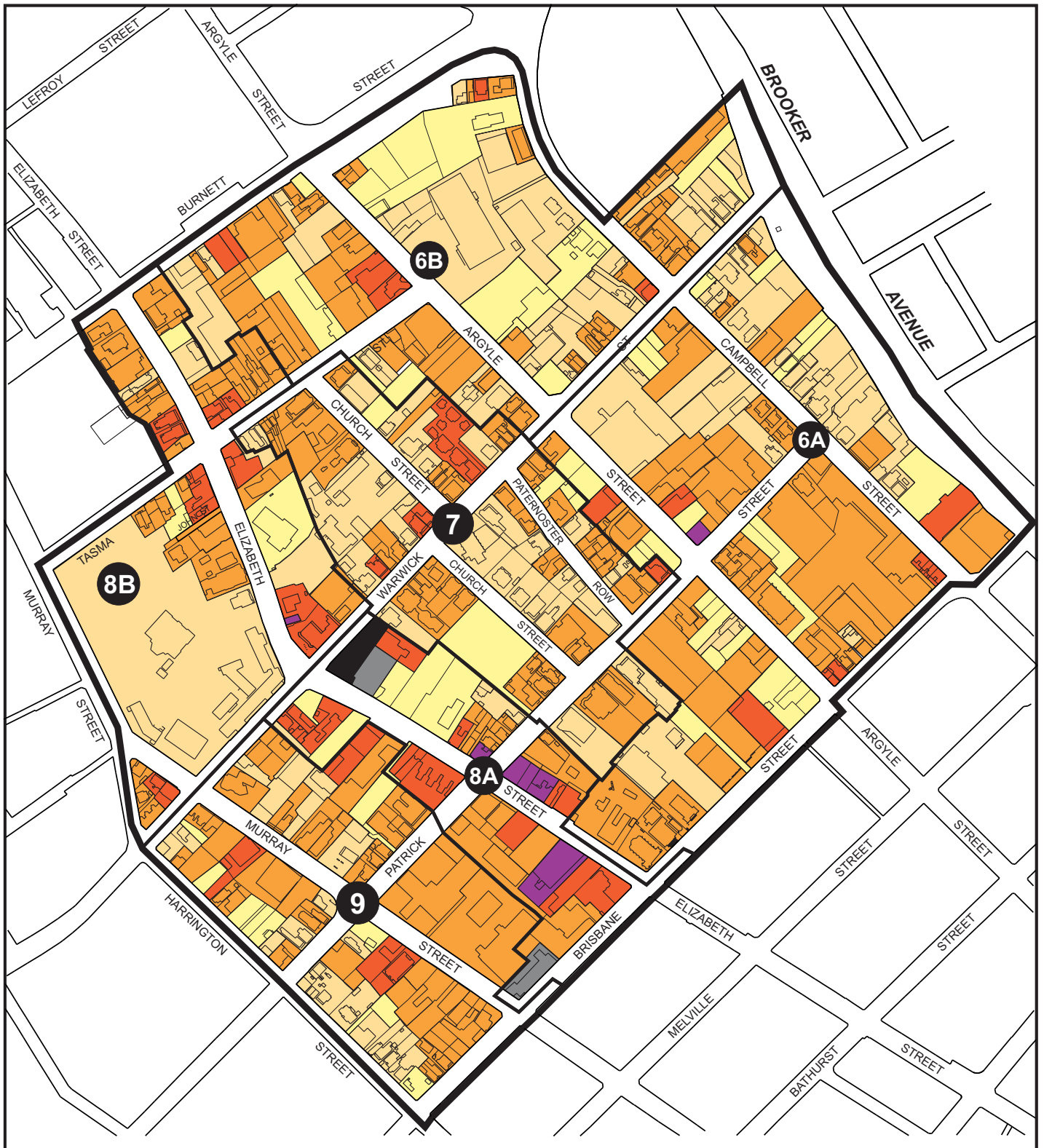


- 1 Storey
- 2 Storeys
- 3 Storeys
- 4 Storeys



- Precinct No. **9**
- Precinct Boundary ———
- Study Area Boundary ———

**NUMBER OF STOREYS FOR BUILDINGS
IN CASE STUDY AREA** **6.5**



KEY TO EXISTING PLOT RATIOS

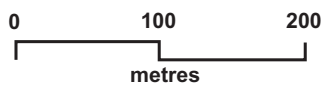
- 0 - 0.2
- 0.2 - 0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 3.0
- 3.0 +



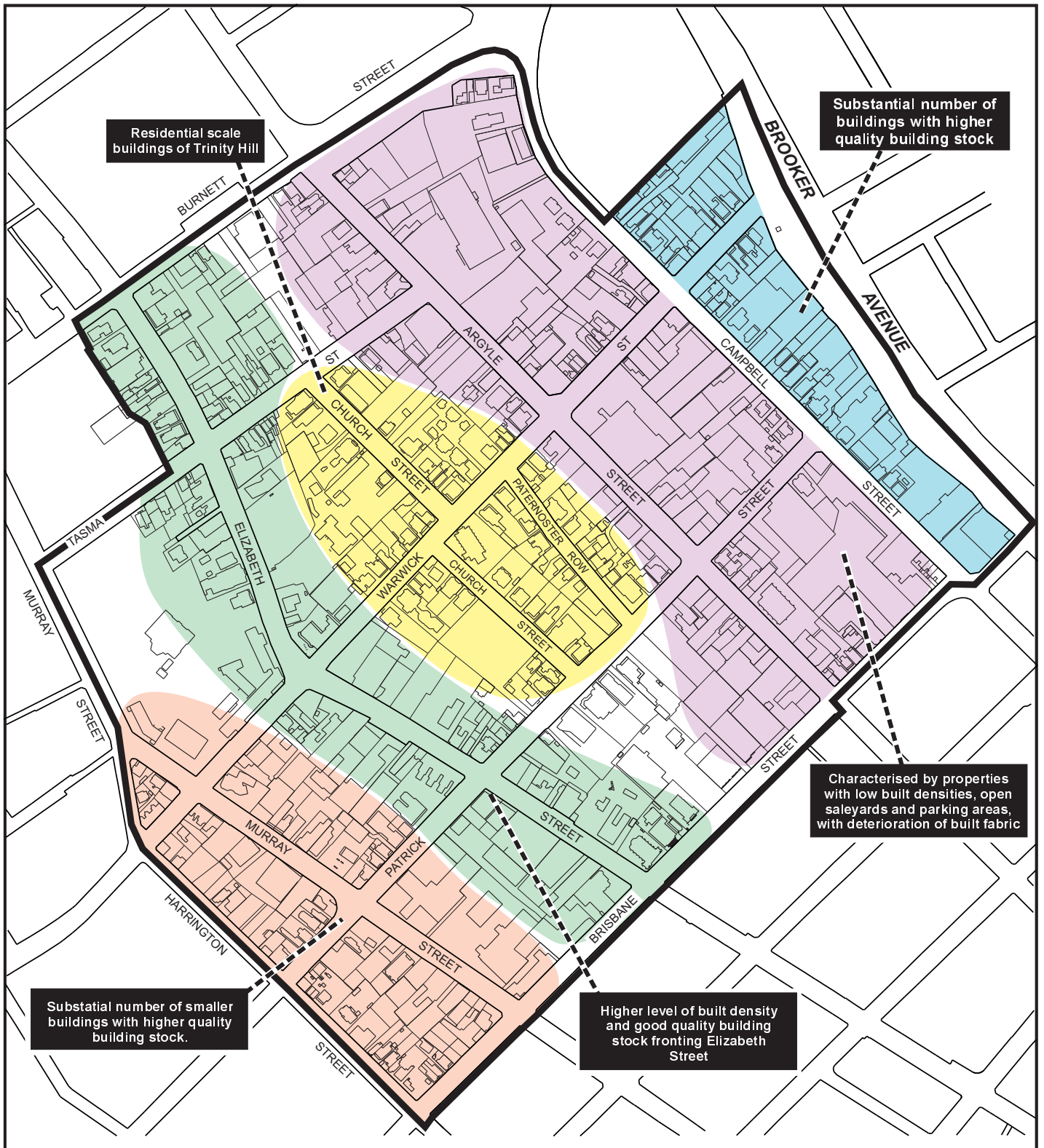
Precinct No. **9**

Precinct Boundary

Study Area Boundary



**EXISTING PLOT RATIOS OF SITES
WITHIN CASE STUDY AREA** **6.6**



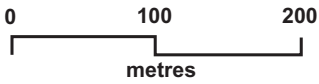
Residential scale buildings of Trinity Hill

Substantial number of buildings with higher quality building stock

Characterised by properties with low built densities, open saleyards and parking areas, with deterioration of built fabric

Substantial number of smaller buildings with higher quality building stock.

Higher level of built density and good quality building stock fronting Elizabeth Street



DISTINCT AREAS OF BUILDING STOCK CHARACTER IN THE CASE STUDY AREA

6.6.2

built densities and deterioration of the built fabric. In contrast, there is a presence of higher quality building stock, increased built density and a large number of smaller buildings within the areas to the east of Campbell Street and within Precinct 9.

6.7. Conclusion

The case study area basically displays a character consistent with that of other central service areas. That is, a mix of wholesaling, commercial, light industrial, saleyard and small office type uses locating adjacent to or replacing previous residential properties, utilising a central location which is more affordable than other inner city areas.

Lower density levels are apparent due to the large ground floor and land extensive nature of the above uses and the failure of the CBD to continue to expand to the extent of using up the density of development in the study area to levels provided for in the planning scheme. Within this trend of basic underutilisation, areas displaying similar characteristics of building stock can be identified.

The street layout displays an obvious hierarchy. Streets running north-south are subject to much larger vehicle movements than the cross streets and internal streets of Trinity Hill.

The next chapters will provide some insight to the recent development or changes in the area and the functions of this area perceived by its occupants.

7. Development Application Review 1984 -1998

7.1. Introduction

As previously stated development (which includes changes of use) within the case study area is subject to the provisions of the City of Hobart Planning Scheme 1982. This chapter examines how the case study area has performed under the operation of this Planning Scheme. Results gained from this research will provide some insight as to the demand for and appropriateness of the zoning which specifically provides for central service type uses.

7.2. Background

Although the current scheme did not come into effect as a finally approved Planning Scheme until December 1991, the policy basis was applicable to development in the form of various interim orders from September 1984.

Up until the ‘Z Series Amendments’ of October 1997 the Planning Scheme had a provision under Clause 2.6.1 for Council to approve a development not in accordance with a Schedule but which did not conflict with the Scheme *Principles or Statement of Desired Future Character* for the relevant Precinct. This approval however required prior written consent of the former Land Use Planning Review Panel (and before that the Commissioner for Town and Country Planning) if the development involved a *prohibited* use.

The ‘Z Series Amendments’ altered this provision to only allow *prohibited* uses under circumstances referred to in *Principles 3 and 4* of the Planning Scheme. These basically only allow a change to a *prohibited* use where the proposed use is more in conformity with the *Statement of Desired Future Character* than the existing use or for the purposes of facilitating the preservation of the character of land or a building of heritage significance.

7.3. Methodology

A data base of all planning applications within the study area since 1984 has been compiled by researching all relevant Council property files. This research recorded the address, development application number, type of development, uses, changes in plot ratio and special conditions applied. A sample of this data base is provided as an example in Appendix 7.3.

This combined research provides a sound basis for reviewing the evolution of the case study area and to demonstrate how it has changed in use and built form over this period. It also provides an examination of whether this development has been consistent with the preferred uses, density and character directions under the Planning Scheme.

The Planning Scheme operates on a precinct basis. It is therefore appropriate to examine the patterns of development in relation to each of these Precincts. The record

of changes of use indicates whether new uses are tending towards the Planning Scheme’s preferred, or *permitted* uses and a review of changes in plot ratio establishes the demand for the varying plot ratios within the study area. Conclusions from this analysis supports the case for a review of the appropriateness of the current policy framework for this ‘central service’ area.

7.4. A general review of Planning Applications within the study area

There are 416 properties within the study area. Of these, 275 different properties were subject to a Planning Application of some sort from January 1984 to August 1998. One third of all properties were not subject to any proposal. The percentage of properties subject to Planning Applications per Precinct are displayed in Table 7.4.

Table 7.4 - Percentage of Sites subject to Development Applications by Precinct.

Precinct	7	9	6A	6B	8A	8B
No. Sites	71	60	96	88	41	60
No. Properties subject to Planning Application	38	43	61	52	29	48
% of Properties subject to Planning Applications	53%	72%	63%	59%	70%	80%

Council entertained 461 separate Planning Applications over this period with many properties having more than one development application. This analysis is based on Planning Applications and decisions only. It does not reveal whether the applications or approvals were implemented. Nevertheless it is considered that the research provides a firm indicator of development intentions during the review period.

Table 7.4.1 and Graph 7.4.1 below summarise the number of each type of application for development within each precinct. Applications involving extension to plot ratio were most common, with new signs and changes of use also prominent. The specifics of these applications are considered below on a precinct by precinct basis.

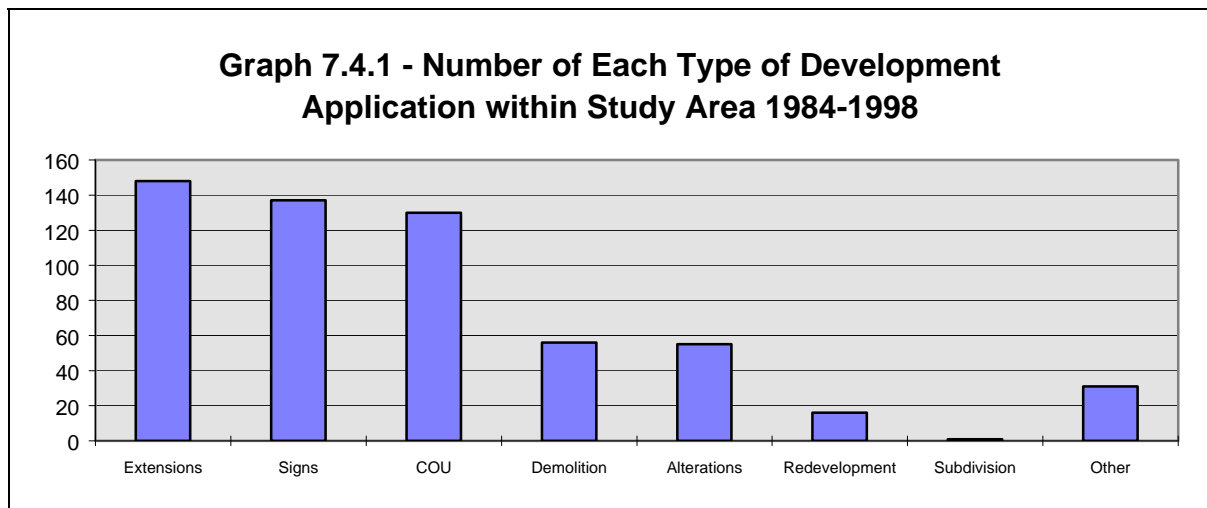
Table 7.4.1 - Number of Development Applications involving each type of development by Precinct.

Precinct	Extensions		Signs		COU		Demolition		Alterations		Redevelopment		Other		Total	
7	27	30%	4	4%	20	22%	18	20%	14	16%	4	4%	3	3%	90	16%
9	23	26%	25	28%	27	30%	6	7%	5	6%	1	1%	3	3%	90	16%
6A	34	29%	36	30%	22	18%	11	9%	8	7%	1	1%	6	5%	119	21%
6B	35	30%	21	18%	29	25%	12	10%	8	7%	3	3%	8	7%	116	20%
8A	6	11%	20	37%	17	31%	2	4%	3	6%	4	7%	2	4%	54	9%
8B	23	22%	31	30%	15	14%	7	7%	17	16%	3	3%	9	9%	105	18%
Total	148	26%	137	24%	130	23%	56	10%	55	10%	16	3%	31	5%	574	

(Source: Author’s review of HCC property files, August 1998)

Definitions for the purpose of this research:

- Extension** - an increase in floor area.
- Alterations** - internal or external changes to a building without altering the amount of floor area.
- Demolition** - removal of floor area or a building.
- Redevelopment** - a transformation of the site involving a new use and building and possibly demolition and replacement of an existing building.
- COU** - change of use



(Source: Authors review of HCC property files, August 1998)

7.5. The Argyle Precinct 6A

7.5.1. Changes of Use

As discussed in Chapter 5, The *Desired Future Character Statement* for *Precinct 6A* encourages its operation as a mixed use ‘fringe’ area providing supporting uses to the Hobart CBD. Consolidation of activities servicing the central area are encouraged, as are other uses which require a central metropolitan location but are not suited to the CBD, such as small offices, retailing, wholesaling, light industry and automotive uses.

The *permitted* uses under the *Planning Scheme* are *service industries, show rooms, car hire premises, light industries, warehouses* and *saleyards*. In theory, if the *Planning Scheme* was operating effectively, changes in use should be tending towards the *Statement of Desired Future Character*. Additionally changes of use should be displacing *discretionary* and *prohibited* uses with *permitted* uses.

Table 7.5.1 represents a total of 25 applications within *Precinct 6A* which involved a change of use during the review period. It shows both existing and proposed uses. These twenty five applications related to about one fifth (19%) of properties.

A slight trend towards the *Planning Scheme*’s preferred uses is apparent from the review, with a total of 11 applications involving proposed *permitted uses* compared to nine existing *permitted uses* (these totals are shown at the bottom and right hand side of the table respectively). This trend is also reinforced with the largest number of applications involving proposed changes to *group XIV* uses such as *light industries, warehouses* and *saleyards*. The use group categories are outlined in Table 6.4.

The next most common change involved applications for new *offices* with a total of 4 received over the review period. This is also consistent with the *Statement of Desired Future Character* for the precinct which intends to provide for small offices which require a central location but are not directly suited to the CBD.

Table 7.5.1 - Existing and Proposed uses of Applications for Change of Use within Precinct 6A, 1984 - 1998.

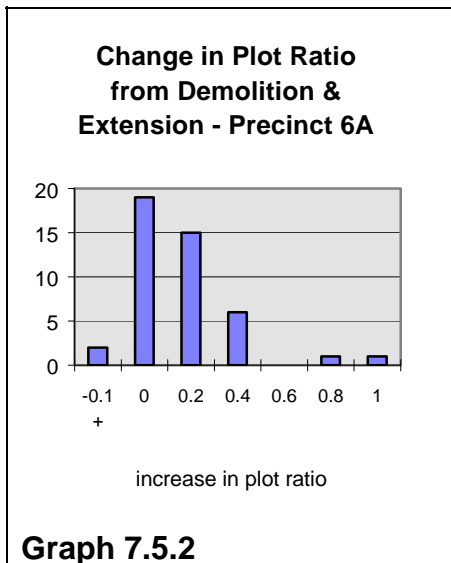
Proposed Use	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	Unlisted	Total
Existing Use																			
I														3					3
II					1			3											4
III																			
IV																			
V																			
VI																			
VII																			
VIII									1									2	3
IX														1					1
X																			
XI																			
XII																			
XIII															1				1
XIV					1				1				2	3				1	8
XV									1					1				1	3
XVI																			
XVII																			
Unlisted									1					1					2
Vacant																			
Total					2			4	3				2	9	1			4	

Key	Permitted Uses	Discretionary Uses	Prohibited Uses

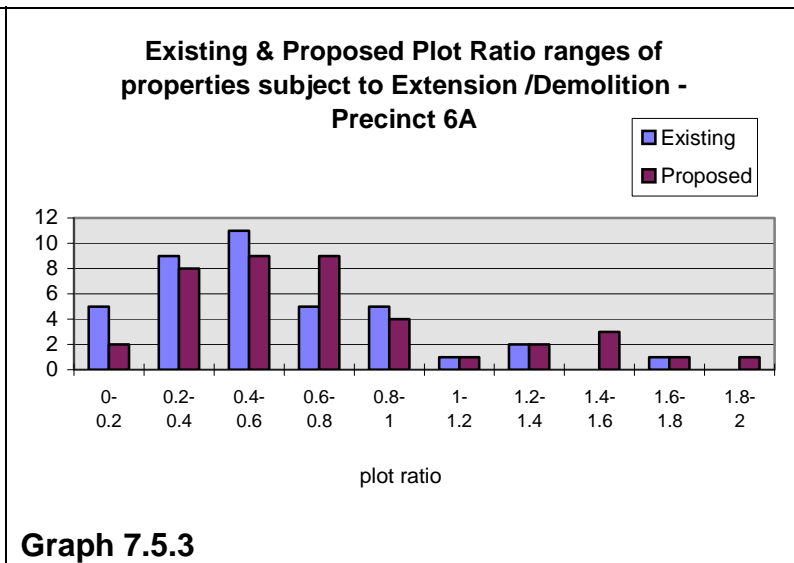
(Source: Authors review of HCC property files, August 1998)

7.5.2. Density - Demolition & Extension

During the period from 1984 to 1998 Council received 34 development applications involving extension to plot ratio and 11 for demolition within Precinct 6A. One application was received for redevelopment of a new warehouse and showroom.



Graph 7.5.2



Graph 7.5.3

(Source: Authors review of HCC property files, August 1998)

Table B1 of the *Density Schedule* of the Planning Scheme provides a *basic plot ratio* of 2.25 and a *maximum plot ratio* of 3.0 for Precinct 6A.

Graph 7.5.3 compares the number of properties within each plot ratio range prior and subsequent to demolition or extension for the Precinct during the review period. This graph shows that over this period no applications sought to utilise the potential *bonus plot ratio* facility over the *maximum plot ratio* of 2.25. In fact there were only two applications which proposed a *plot ratio* above 1.6 with the majority of existing and proposed *plot ratios* below 1.0

The application review also demonstrates that, of a total of forty five applications submitted for extension or demolition, only two proposed an increase in *plot ratio* more than 0.4 (See Graph 7.5.2).

From this research it is obvious that the majority of applications for extension involved only small increases in plot ratio and that existing *plot ratio* provisions have not been utilised anywhere near their potential in *Precinct 6A*.

7.6. The Argyle Precinct 6B

7.6.1. Change of Use

Precinct 6B has the same *Statement of Desired Future Character* and *use group* status as *Precinct 6A*. Therefore *permitted* uses are contained within *use groups XIII* and *XIV* and include *service industries, show rooms, car hire premises, light industries, warehouses* and *saleyards*.

A total of 33 applications involving change of use within this precinct were considered by Council over the review period. These applications related to one quarter of the 88 properties within this precinct. Of these 60% (20 applications) involved changes to *permitted uses* with 8 proposed uses within use group XIII and 12 within XIV (See Table 7.6.1).

Flats were the most common use (6 applications) to be displaced by these *permitted uses*. In addition, 6 *houses* were proposed to change use however only 2 of these were to be replaced by *permitted uses* with 2 changing to *consulting rooms*, which is a *discretionary* use in this Precinct.

The strong trend of displacement of residential uses by new *permitted* uses is consistent with the *Statement of Desired Future Character* for the *Precinct*. Notable new uses, including four new *offices* and three new *shops*, are also consistent with the *Precinct* intent as discussed for *Precinct 6A* above.

Table 7.6.1 - Existing and Proposed uses of Applications for Change of Use within Precinct 6B, 1984 - 1998.

Precinct 6B	Proposed Use	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	Unlisted	Total
Existing Use																				
I						2			1	1				1	1					6
II			2						1					1	4					6
III																				
IV																				
V																				
VI																				
VII										1			1		1					3
VIII															2					2
IX																				
X																				
XI																				
XII																				
XIII										1				1	1				1	4
XIV			1						1											1
XV														3	2					5
XVI														1						1
XVII																				
Unlisted														1	1				1	3
Vacant									1										2	
Total			3			2			4	3			1	8	12	0			4	

Key	Permitted Uses	Discretionary Uses	Prohibited Uses
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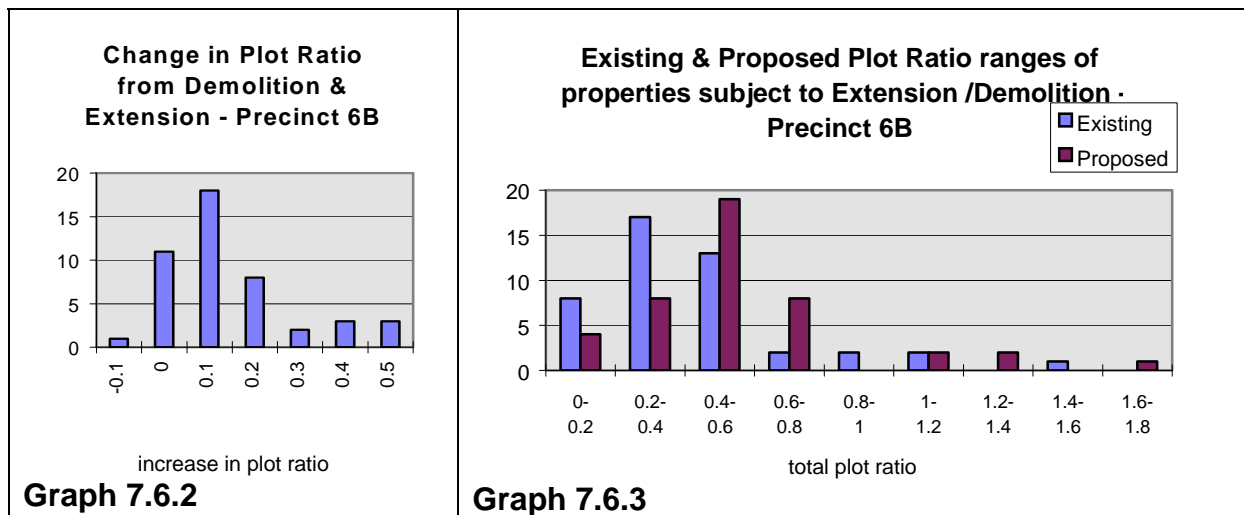
(Source: Authors review of HCC property files, August 1998)

7.6.2. Density - Demolition, Extension & Redevelopment

A similar amount of building activity was proposed in this precinct as Precinct 6A during this review period with 35 applications received for extension and 12 for demolition. In addition, 3 applications were received for redevelopment. Of these, 1 involved demolition of an existing house for a new light industry and the others proposed new offices and a retail development on vacant land.

Schedule B of the City of Hobart Planning Scheme encourages a lower density in Precinct 6B than for Precinct 6A with a *basic plot ratio* of 1.2 and a *maximum plot ratio* of 1.6.

Over the application review period the mean plot ratio increased from 0.2-0.4 to 0.4-0.6 with an increase in plot ratio of 0.1 most common (see graphs 7.6.2 and 7.6.3).



(Source: Authors review of HCC property files, August 1998)

Three applications proposed a new *plot ratio* above the *basic plot ratio* (see graph 7.6.3), only one of these a *plot ratio* in excess of the 1.6 *maximum plot ratio*. All other applications involved proposed *plot ratios* below 0.8.

Although the majority of applications for extension involved only small changes in built density, larger extensions were also notable with 6 applications involving changes in *plot ratio* in excess of 0.4 (see graph 7.6.2).

The total number of applications received for extensions over this review period demonstrates a trend towards the *basic plot ratio* and *Statement of Desired Future Character* for the Precinct which aims to reduce vacant and underutilised land. It is apparent however that the majority of applications did not utilise the *plot ratio* potential over 0.8.

7.7. The Murray Precinct 9

7.7.1. Change of Use

Like *Precinct 6A* and *6B*, *Precinct 9* is also located within the *Central Service Zone* and therefore has the same *use group* status as the above *Precincts*. However, proposed development within this precinct is subject to a different *Statement of Desired Future Character*.

Its *Statement of Desired Future Character* encourages a diversity of uses such as wholesaling, light industry and automotive businesses to intensify without detracting from the amenity of existing residential development. This Precinct contains 60 different properties, of which 38% were subject to an application for a change of use.

As with the other Central Service Precincts 6A & 6B, applications for new *offices* were also prominent in Precinct 9, with a total of 11 applications received for this *discretionary* use over the review period. Of these, 5 displaced residential uses (see Table 7.7.1).

No trend towards the *permitted use groups* is obvious in table 7.7.1. Overall there were 7 applications which proposed a change to a permitted use as opposed to 6 existing *permitted* uses.

Table 7.7.1 - Existing and Proposed uses of Applications for Change of Use within Precinct 9, 1984 - 1998.

Precinct	Proposed Use	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	Unlisted	Total
Precinct 6B																				
Existing Use																				
I						1			2						2					5
II									3											3
III																				
IV																				
V																				
VI																				
VII																				
VIII						1			1	1					2					5
IX						1			1	1										3
X									1						1					
XI																				
XII																				
XIII									2							1				3
XIV															2				1	3
XV									1											1
XVI																				
XVII																				
Unlisted																2				2
Vacant																			2	
Total						3			11	2					7	3			3	

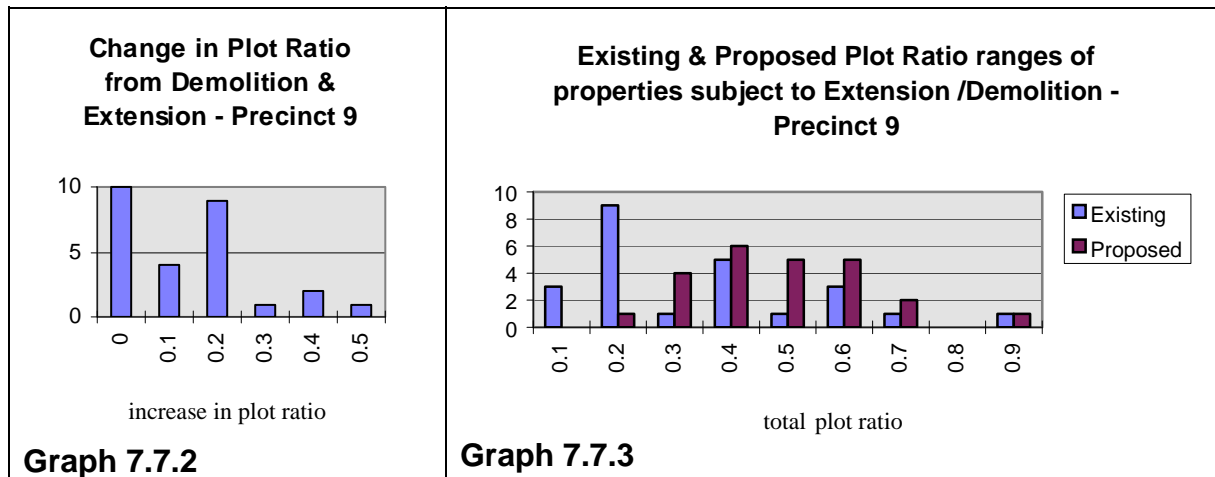
Key	Permitted Uses	Discretionary Uses	Prohibited Uses
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(Source: Authors review of HCC property files, August 1998)

7.7.2. Density - Demolition & Extension

The Planning Scheme provides a *basic plot ratio* of 2.25 and a *maximum plot ratio* of 3.0 for this Precinct.

Council entertained 23 applications for extension, 6 for demolition and one (1) for redevelopment for a new warehouse and flat over the review period. Of these none utilised anywhere close to the prescribed plot ratio.



(Source: Authors review of HCC property files, August 1998)

Graph 7.7.3 shows a slight increase in the mean plot ratio between the existing and proposed plot ratios however applications were small as a general rule (see Graph 7.7.2) and none proposed a plot ratio in excess of 0.9.

7.8. The Trinity Hill Precinct 7

7.8.1. Change of Use

The *objective* of the *Residential 1 Zone* is to sustain and enhance the character and amenity of established residential areas with minimal intrusion of non residential uses not necessary to serve local residents. *The Statement of Desired Future Character* for *Precinct 7* states that it should maintain its traditional role as an inner residential area. To support this intention, *Schedule A* of the Planning Scheme, provides *use group I* (*houses, home occupations*) as *permitted* uses. Other residential type uses, contained in *groups II, III and IV*, consistent with the *Statement of Desired Future Character* such as *flats, multiple dwellings* and *domestic businesses* are *discretionary*.

The review of applications over this period revealed that 18% of properties within this precinct were subject to a change of use (a total of 22 applications - see table 7.8.1 below). Of these 10 involved existing houses. No *prohibited* uses were proposed to change to *permitted* uses.

A total of three applications were refused, two of these proposed displacement of *houses* for *holiday units* and the other displacement of a *house* for a *welfare institution*.

Table 7.8.1 - Existing and Proposed uses of Applications for Change of Use within Precinct 7, 1984 - 1998.

Precinct 7	Proposed Use	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	Unlisted	Total
Existing Use																				
I		2	1	2	2		1				<u>2</u>									10
II					1															1
III								1												1
IV																				
V						2														2
VI																				
VII																				
VIII																				
IX																			1	1
X																				
XI																				
XII																				
XIII																				
XIV		1											1							1
XV																				
XVI																				
XVII																				
Unlisted		1	2																	3
Vacant											1				2					3
Total		4	3	2	3	2	1	1			3		1		2				1	

Note: Bold underlined figure refer to applications refused

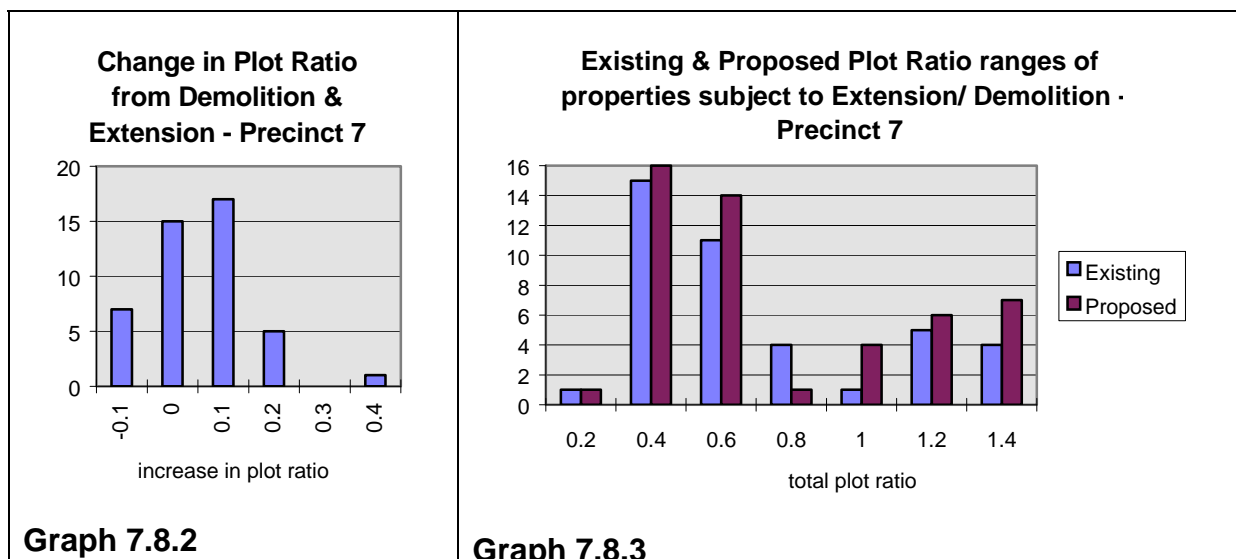
Key	Permitted Uses	Discretionary Uses	Prohibited Uses
-----	----------------	--------------------	-----------------

(Source: Authors review of HCC property files, August 1998)

The operation of this *Precinct* in terms of use over the review period is consistent with the intent of the Planning Scheme. A total of 12 applications involved proposed residential type uses spread across *use groups I* to *IV*. Additionally, applications which involved displacement of residential uses for *prohibited* uses were refused.

Intensification of residential uses in the area is also apparent with single houses changing to *flats* (3 applications), *multiple dwellings* (2 applications) and one application which developed twelve *houses* from an existing *light industry*. A trend towards home businesses can also be seen with new *home occupations* (2 applications) and *domestic businesses* (2 applications).

The refused applications infer that there is pressure for encroachment of commercial and light industrial type uses in the area and that these preferred residential uses may be displaced if not protected through the zoning and use controls.



7.8.2. Density - Demolition & Extension

The *maximum* and *basic plot ratios* for the Trinity Hill Precinct 7 both encourage quite a low built density of 0.5. This is reflective of the intent to provide residential amenity and *useable landscaped space*.

Applications involving extension (27 applications) and demolition (18 applications) were quite common within this inner city residential precinct over the review period. Of the applications for demolition 11 involved only partial demolition associated with house extensions. The majority of these involved extension or improvements to the rear of these houses and often the removal of existing weatherboard lean-tos.

Four non-conforming uses sought to extend.

The majority of applications involved extensions within the plot ratio however 9 did propose to extend plot ratio above this maximum (see Graph 7.8.3). Specifically these applications related to *houses* (3 applications), *flats* (1 application), *light industries* (3 applications) and a *welfare institution* and *office* (1 application each). Of these proposals only three involved an increase in plot ratio in excess of 0.1, none of these involving an increase more than 0.18 (see Graph 7.8.2). There is no bonus plot ratio facility available for development within Precinct 7.

Three proposals to extend beyond *maximum plot ratio* were refused, however these were not necessarily only *prohibited* uses as one proposal to extend a *house* was refused.

It is apparent that the density provisions for this precinct have been utilised extensively with significant demand to increase floor area over and above the prescribed maximum of 0.5. This is most likely due to the small lot sizes and the fact that the majority of sites have existing buildings occupying close to the 0.5 maximum plot ratio.

7.9. The Elizabeth Precinct 8A

7.9.1. Change of Use

The Statement of Desired Future Character for Precinct 8A encourages maintenance of the area's retail, wholesaling and office function, and recognises residential as an important subsidiary activity. The Precinct has 41 properties.

A total of 29 applications, affecting 14 properties, were received for change of use within Precinct 8A over the review period (see table 7.9.1). Of these the majority involved changes from one *permitted* use to another with a total of 23 proposed *permitted* uses. *Offices* were most common (11 applications and a net increase of 6) with almost half of these displacing residential uses. *Service industries* and *showrooms* were also prominent (7 applications for *Use Group XIII*).

Three applications were received for redevelopment. One was for a new mixed use, *office, showroom and warehouse*, another for a *showroom and office* and the other for a *welfare institution*.

No applications were entertained for change to a *prohibited* use.

Whilst the applications demonstrate consistency with the preferred uses of the Planning Scheme, the importance of residential as “a subsidiary use” has perhaps not been successful with a total of eight applications displacing *houses* (5 applications) and *flats* (3 applications).

Table 7.9.1 - Existing and Proposed uses of Applications for Change of Use within Precinct 8A, 1984 - 1998.

Precinct 8A	Proposed Use	I	II	III	IV	V	VI	VII	VIII (b)	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	Unlisted	Total
Existing Use																				
I						1			2					2						5
II									3											3
III																				
IV																				
V																				
VI																				
VII																				
VIII						1			1	1				2						5
IX						1			1	1										3
X									1					1						
XI																				
XII																				
XIII									2						1					3
XIV														2					1	3
XV									1											1
XVI																				
XVII																				
Unlisted															2					2
Vacant																			2	
Total						3			11	2				7	3				3	

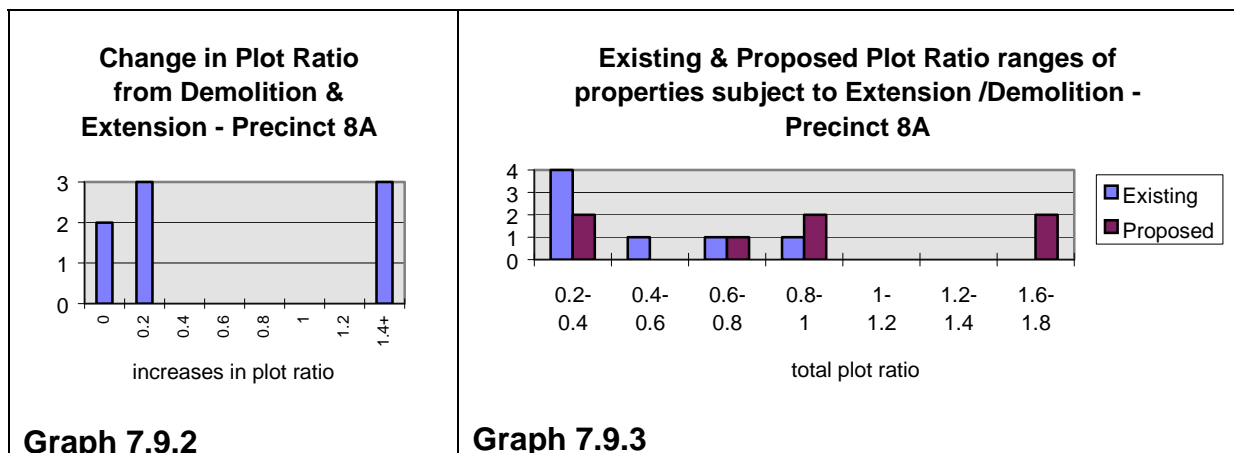
(b) Subject to a maximum ground floor frontage of 6m.

Key	Permitted Uses	Discretionary Uses	Prohibited Uses
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(Source: Authors review of HCC property files, August 1998)

7.9.2. Density - Demolition & Extension

The Planning Scheme provides for quite a high level of density within this precinct with a *basic plot ratio* of 2.25 and a *maximum plot ratio* of 3.0. However this potential has not been utilised by new applications during the operation of the Scheme.



Over the review period only 6 applications were received involving extension, and 2 applications involving partial demolition.

Graph 7.9.2 indicates that of these 5 involved a change of *plot ratio* of 0.2. The only applications which involved an increase in excess of 0.2 were redevelopments of vacant sites which did so dramatically with all 3 increasing *plot ratio* by more than 1.4. These applications were the only ones which involved a proposed *plot ratio* above 1.0 (see Graph 7.9.3).

7.10. The Elizabeth Street Precinct 8B

7.10.1. Change of Use

The intent of the Statement of Desired Future Character for Precinct 8B is for the area to evolve as a retail and community service area between adjacent residential Precincts of West Hobart and Trinity Hill.

Table 7.10.1 - Existing and Proposed uses of Applications for Change of Use within Precinct 8B, 1984 - 1998.

Precinct 8B	Proposed Use	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	Unlisted	Total
Existing Use																				
I									1											1
II									1										1	2
III																				
IV																				
V									1											1
VI																				
VII																				
VIII							1												1	2
IX						1					1									2
X																				
XI																				
XII																				
XIII										1	1									2
XIV															1					1
XV									1						1					2
XVI																				
XVII																				
Unlisted										1										1
Vacant			1			1														
Total			1			2	1		3	3	2				2				2	

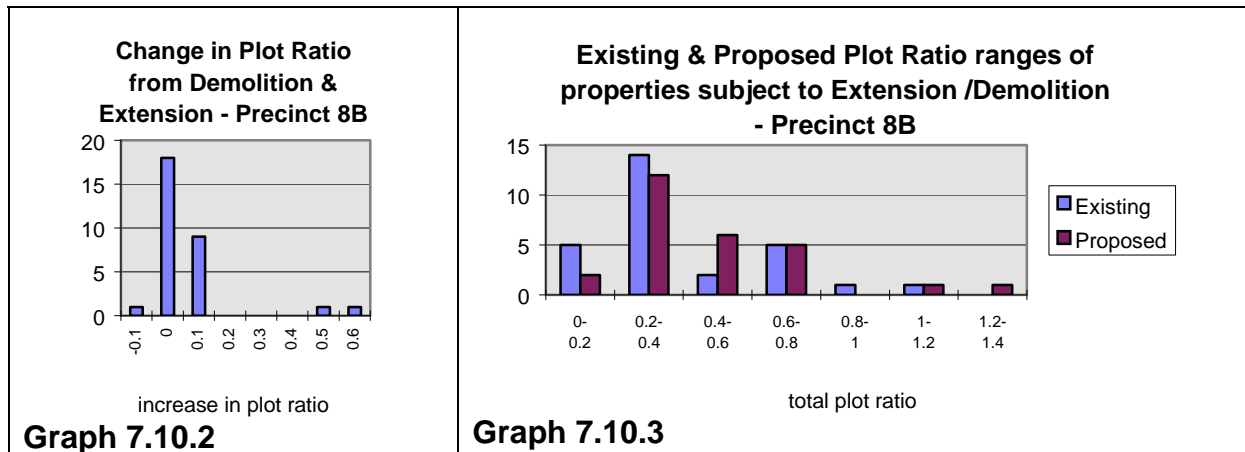
Key	Permitted Uses	Discretionary Uses	Prohibited Uses

(Source: Authors review of HCC property files, August 1998)

A total of 16 different changes of use were proposed in this Precinct during the review period. Maintenance of the Planning Scheme’s preferred uses is apparent with 9 of the existing and proposed uses *permitted* and 3 *discretionary*. Two uses changed from one *prohibited* use to another. It is also interesting to note that two applications were received for restaurants (*discretionary*) and a further two for takeaways (*permitted*).

7.10.2. Density - Demolition & Extension

The *Statement of Desired Future Character* for this *Precinct* intends new development to be of lesser density than that to the south (*Precincts 8A & 9*) and blend with the nearby residential areas. The *plot ratio* for this *Precinct* provided in *Table B.1* of the *Density Schedule* is consistent with this intent with *basic* and *maximum plot ratios* of 0.9 and 1.2 respectively.



Graph 7.10.3, using existing and proposed plot ratios, infers a slight increase in the mean *plot ratio* over the review period. Only two applications involved a plot ratio increase in excess of 0.8 and only one of these was above the *maximum plot ratio*.

Generally changes in *plot ratio* were small (see Graph 7.10.2) with 28 applications of a total 30 involving an increase less than a 0.15 increase in plot ratio.

7.11. Conditions of Approval

It was common practice throughout this review period for Council to give Planning Approval subject to conditions. The most frequently used related to appropriate materials and finishing of development subject to the heritage provisions, specific provision for loading and unloading of vehicles on site, requirements for vehicles to access and exit the site in a forward direction, and provision and maintenance of on-site landscaping.

7.12. Conclusion

The comparatively large number of applications received for extensions and changes of use over the application review period from 1984 to 1998 indicate retention and adaptation of the existing building stock within the case study area for changing uses.

Generally, changes of use were consistent with the preferred uses of each of the precincts although it is apparent that the Trinity Hill Precinct, as an inner-city residential enclave, is under pressure from commercial and light industrial uses. Outside this residential precinct, changes to new offices have also been significant particularly in the areas on the western side of the study area (in Precinct 9 almost half of all applications for change of use were for offices and in 8A more than a third).

New applications for saleyards and warehouses were both common within the Central Service Zone to the east of the study area, within Precincts 6A and 6B. In contrast offices were the most prominent type of new use in the other Central Service Precinct 9 to the west. Residential uses were commonly displaced in association with these new uses.

These factors show consistency between the theory analysis of central service areas reviewed in Chapter 2 and the study area. That is, a changing diversity of commercial, wholesaling, service and light industrial type uses, displacing residential, and locating in suitable premises, in close proximity to the CBD. The static growth described by Preston is also apparent as the existing generous plot ratio provisions for precincts 6A, 8B and 9, in particular, have not been utilised. This generally low rate of change of building fabric reflects the limited pressure for redevelopment of the case study area.

These research findings are discussed further in Chapter 9.

8. Perceptions of the Study Area from its occupants

8.1. Introduction

To support the review of the demand for such a central service area, and the appropriateness of the current planning controls under the City of Hobart Planning Scheme 1982 it was also necessary to identify operational perceptions from residents and businesses within the study area.

8.2. The Brief

Through the Hobart City Council the author constructed a brief for this research which was principally framed around the existing Planning Scheme provisions. It was also recognised however, that issues may be raised that may not be dealt with under a planning scheme but through other action or initiatives. Essentially, this brief identified the need to explore the views of residents and businesses as to the functionality of the area and their future plans for development. The proposed questions relative to this brief are included in Appendix 8.2.

The survey of businesses was aimed at finding out how long businesses had been in the area, their reasons for locating there, likes and dislikes about the location, problems that they may now be experiencing and possible plans for future expansion or relocation.

The survey of residents also aimed to ascertain the attitudes, perceptions and suggestions of residents about the locality in which they lived.

It was thought that use of a market research consultant to carry out the survey work would be necessary due to time constraints. It was also considered that this would encourage a higher level of response to the questionnaires and maintain a level of anonymity for those surveyed. The latter particularly was thought important as people can often be sceptical of Council's intentions regarding the use of survey information especially when the questions relate to finances.

Council commissioned Enterprise Marketing and Research Services in June 1998 to fulfil this brief.

8.3. Informational Objectives

Specifically the informational objectives for each survey were:-

Business Operators;

1. gather information about their type of business, its floor area, the number of people employed, the amount of off street parking it provides,
2. determine how long each business had operated in the area including how long it had operated at that site, the reasons for locating in the area and ascertaining the salient attributes lying behind locational decisions, what they liked and disliked about the area and the extent to which it had improved or degenerated since they moved into the area,
3. identify problems encountered from other land uses, and

4. discover whether the businesses would like to relocate and if so, where to,
5. determining whether the business had a trade waste facility such as a grease trap, whether it used recycling or waste minimisation procedures and the forms of heating it used.

Residents;

1. determine when they moved into the area and their reasons for selecting the area and what they liked and disliked about the area,
2. identify problems they had encountered as a result of the operations of others, other land uses in the area and the extent to which other land uses had created problems,
3. discover whether they would like to move and if so, where to, and
4. determine the forms of heating they used and whether they made use of Council's recycling collection facility.

8.4. Research Methods

Council rates records indicated that there were 270 business premises and 215 residential properties within the study area. Informational objectives outlined in the brief were achieved by the Consultants administering structured questionnaires to each group. These questionnaires are reproduced in Appendix 8.4.

Information from business organisations was obtained by using a drop and collect method, supported by a media release and a letter to businesses seeking their co-operation. Two hundred businesses were surveyed with the intention of gathering a minimum of 100 responses.

Information from residents was gathered by administering a survey by telephone.

The author then directed the collation of these results to ensure that subtleties from the completed questionnaires were not generalised and lost in the grouping of 'other' or 'open ended' responses.

8.5. Summary of Findings

The Consultants provided a summary of findings from the research. Some tables from this report are reproduced below to support the description of the general survey findings for the case study area.

The results are then examined on a precinct basis.

8.6. The Business Survey

A total of 117 businesses were surveyed. A good distribution among most precincts was achieved with a variety of different business types responding to the survey.

The survey results indicate that half of all business operators and two thirds of residents have located in this area for at least ten years and that approximately 70% of all respondents have no real problem with the operation of this central service case study area as it exists.

The majority of businesses alluded to the fact the area had not changed significantly in recent years with two thirds of all respondents indicating the area as neither less nor more suitable than when they first located. Unlawful parking, crime and street appearance were identified as the main problems in the area which need to be addressed and improved (see Table 8.6.1).

TABLE 8.6.1 - WHAT PEOPLE DISLIKE ABOUT THE AREA AS A LOCATION FOR THEIR BUSINESS : BY PRECINCT

Precinct	Total Number surveyed	Parking problems	Cleanliness and Council Maintenance Streetscaping	Crime & Vandalism	State of Other Properties
6A	34	12	-	3	1
6B	23	7	1	2	1
7	6	2	-	-	-
8A/B	39	10	1	5	4
9	13	1	1	2	-

Source: EMRS Summary Report on "Study of the Area North of the CBD", July 1998.

Ability to obtain a suitable premises, closeness to the CBD, adequate off street parking and a prominent visible location were the main factors given by businesses to influence the initial choice of location (see Table 8.6.2).

TABLE 8.6.2 - FACTORS LEADING TO ORGANISATIONS CHOOSING TO LOCATE IN THE AREA : BY PRECINCT

Precinct	Total Number surveyed	Suitable Premises	Proximity to CBD	Off Street Parking	Prominent Location
6A	34	20	20	13	10
6B	23	16	6	6	9
7	6	3	3	1	-
8A/B	39	22	15	12	15
9	13	9	7	8	6

Source: EMRS Summary Report on "Study of the Area North of the CBD", July 1998.

As with the Development Application review of the previous chapter, the survey results found that there is little demand for businesses to expand significantly with only 10% of respondent organisations planning to extend. Additionally, only 4% plan to extend by more than a quarter of their size. These results are indicators only and provide no real test of the strength of the sentiment of these intentions.

It can be assumed that organisations were generally satisfied with their location as only 14 % said that they would like to change their location if they were able to do so.

The availability of off street car parking was a common asset for businesses within the study area with 60% of respondents indicating provision of at least 5 spaces. Almost a quarter (24%) have access to at least one but less than five spaces and only 16% have no off street parking provision.

Fifty-eight percent of businesses employ recycling or waste management procedures on site and just over a third (36%) have a trade waste facility of some kind such as a grease trap.

TABLE 8.6.3 - THE MOST FREQUENTLY MENTIONED SUGGESTIONS TO COUNCIL

Suggestion	Number of Organisations	Percentage n=117
No Suggestion at all	45	38
Improve the parking	21	18
Collect rubbish	12	10
Reduce the rates	12	10
Clean streets and gutters better	11	9
Improve or repair footpaths	6	5

Source: EMRS Summary Report on "Study of the Area North of the CBD", July 1998.

It was commonly suggested by 18% of business respondents, that Council should do more to improve parking in the case study area. Other suggestions related to improvement of the general appearance of the area through better rubbish collection services (19%) and the repair and maintenance of footpaths (5%) (see Table 8.6.3).

8.7. The Residents Survey

A total of 51 residents were interviewed by telephone. Representation was sought from all precincts. Two thirds of respondents have lived in the area for at least 10 years. In comparison, about a quarter have been there for less than 3 years. There are large proportions of residents who are renting (41%), and those who own their property or are in the process of buying (59%).

One might expect the high proportion of rented properties to result in a higher figure of short term occupation in the area. This association would suggest that the area contains a significant proportion of long term renters.

As might be expected, the convenience associated with living close to the CBD was the most common reason for living in the area. This was cited by 90% of respondents. Specifically the ability to walk to work and being close to the amenity of shops and restaurants were mentioned as advantages for residents (see Table 8.7.1).

TABLE 8.7.1 - WHAT PEOPLE LIKE ABOUT LIVING IN THE AREA

Things people like	Number of residents	Percentage n=51
Close to the City	46	90
Walk to work	13	35
Close to shops & restaurants	18	25
Peaceful/Quiet at Night	6	12
Close to North Hobart	5	10

Source: EMRS Summary Report on "Study of the Area North of the CBD", July 1998

Noise (29%), crime (18%) and problems associated with traffic and parking (26%) featured prominently as the principle things that detract from living in the area. However over a third (35%) of those surveyed found nothing to dislike about the area at the present time (see Table 8.7.2).

TABLE 8.7.2 - WHAT PEOPLE DISLIKE ABOUT LIVING IN THE AREA

Things people dislike	Number of residents	Percentage n=51
It is noisy	15	29
Crime & vandalism	9	18
Parking problems	6	12
Heavy through traffic	7	14
Street conditions	5	10
Too many businesses	3	6
Nothing	18	35

Source: EMRS Summary Report on "Study of the Area North of the CBD", July 1998

The mix of residential/ non residential uses in the area was seen as about right by the majority (71%) of residential respondents. In addition, a general satisfaction with the current operation of the area was apparent with almost half (47%) of residents stating no problems associated with co-locating with businesses. A further 28% of residents considered problems to be minor.

The majority of residents (71%) or nearly three quarters, would not like to change where they lived. Of those who said they would, "views", "more residential" and "peace and quite" were the most common reasons for wanting to move.

Eighty percent of the residents had off street parking facilities.

Suggestions on how the Council could improve the living area north of the CBD (See Table 8.7.3) included beautifying the streets, traffic calming measures and improving parking facilities for residents.

Table 8.7.3 - What could the Council do to Improve Your Living in the Area north of the CBD?

Suggestion	Number	Percentage n=51
Beautify the streets	6	14
Reserve parking/improve it for residents	3	12
Traffic calming measures	9	10
Act on complaints quickly	2	4
No suggestions	2	4
	17	33

Source: EMRS Summary Report on "Study of the Area North of the CBD", July 1998

8.8. Precinct Specific results

The majority of survey results were similar across this central service study area. However, variations to the above summary, or points of interest on a Precinct basis, are identified below.

8.9. The Argyle Precinct 6A and 6B

The survey results demonstrate that businesses within the Argyle Precincts 6A and 6B primarily chose their location for its proximity to the CBD and its suitable premises. In Precinct 6B, which is further removed from the CBD, the importance of proximity to the CBD was given less emphasis by those surveyed.

Thirty five percent of business respondents in Precinct 6A identified unlawful parking as the biggest dislike about the area as a location for their operation. This level of

dissatisfaction may be due to a deficiency of off street car parking as both the Argyle Precincts have larger than average proportions of businesses which have no off street car parking provision. Almost a quarter (23%) of business respondents in Precinct 6A have no such provision while in Precinct 6B this figure rises to over one third (35%).

As indicated above, businesses within the study area were generally satisfied with their location however a larger trend of dissatisfaction was stated in the Argyle Precinct 6A with 18% of respondents wanting to relocate for a variety of reasons.

The residential survey indicates that crime is perceived as a significant problem in Precinct 6A in particular with 35% of its respondents providing responses to this end. Additionally, 15% of residential respondents in the same Precinct mentioned both noise and a lack of car parking as a disadvantage of living in this area.

In contrast to the general study area, where problems were usually not seen as serious, exactly half of residents within Precinct 6A indicated that these problems were at least quite serious. Thirty percent of residents in this precinct expressed a desire to change where they lived.

Collectively these results suggest that at present this precinct is not very suitable for residential living. Interestingly, only one complaint relating to noise is obvious in the adjacent and consistently zoned Precinct 6B.

Understandably, suggestions for Council to improve the status-quo for residential properties were most common in Precinct 6A. These related to enforcement of noise regulations, the reservation or improvement of parking for residents and traffic calming measures.

8.10. The Trinity Hill Precinct 7

Proximity to the CBD and availability of a suitable premises were the main factors influencing the initial location of businesses in this Residential Precinct. As it is likely that through traffic in Church Street and Paternoster Row is much less than on the other streets in the case study area, it is not surprising to note that none of the respondents indicated visibility to customers and prominence of location as major reasons for locating at Trinity Hill.

Businesses in Precinct 7 show variance from the general trend within the study area which demonstrates few plans for extension. Two thirds of those surveyed said they had plans to extend. Half of these (33% of the total) indicated a desire to extend by at least a further 50%.

Dissatisfaction from businesses, with the restrictive nature of existing planning controls of this residential precinct, may be apparent with one third of respondents asking Council to “cut red tape and be more co-operative”. This is not surprising given the Planning Scheme’s restrictions on non-conforming uses.

One quarter of residential respondents indicated that noise from business was a problem in this Precinct. However, only one respondent indicated that the area was worse than when they first moved in.

Twenty five percent of residents indicated that this residential precinct had in fact improved as a place to live due to more renovation of the existing housing stock. Similarly residents were generally satisfied with the existing mix of residential and non-residential uses.

8.11. The Elizabeth Street Precincts 8A & 8B

An Elizabeth Street frontage arose from the survey as a common reason for businesses locating within Precincts 8A and 8B, with 41% of respondents within these two Precincts indicating the importance of a prominent visible location.

Although over three quarters of businesses (77%) within the study area said they did not experience problems from their inner city location, 30% of those surveyed within these two particular Precincts stated problems relating to parking.

8.12. The Murray Precinct 9

Availability of off street parking and a suitable location were the most common attraction for new businesses in this Murray Precinct.

As indicated above, the majority of businesses within the study area don't identify significant changes within the area since their establishment. In this Precinct however, 30% of businesses stated that the area had improved as a place to do business due to increased customers resulting from new businesses in the area. This suggests that the establishment of certain uses within an area can produce positive on-flowing effects for other uses.

The residential survey identified a significant problem of noise within this precinct with eighty five percent of all respondents raising this as a "dislike".

8.13. Summary

Generally business operators and residents within this central service area are content with its operation and mix of uses. Although the survey did not cover users of the case study area, this level of satisfaction of the business operators suggests that the area serves its users well, as the best sign of content customers is a contented business operator.

These survey findings also indicate that the perceived characteristics and advantages of living and operating in the area, such as proximity to the CBD, are consistent with the Desired Future Character Statements of the individual Precincts.

Consistent with Preston's theory that these areas termed 'transition zones' are often static in nature, both the residential and business survey groups generally recognised that the character of the area had not altered significantly since they had located there. They also generally stated that the offered amenity had neither improved nor

decreased. However, a sizeable portion of residents within the residentially zoned Trinity Hill Precinct considered that the amenity of this area had improved due to renovation of the existing housing stock. This sort of improvement is consistent with the intent of this zoning. Additionally, many businesses within Precinct 9 felt that the area had improved as a result of positive effects from the establishment of new uses in the vicinity.

The most common dislikes and suggestions for improvement from both groups indicated parking and the appearance of the area as main issues for Council's consideration. Responses in Precinct 6A in particular show strong dissatisfaction with current parking arrangements. These problems may relate to the large number of businesses (25%) without off street car parking spaces. These problems, combined with the identification of crime and noise as significant problems means that some significant measures are necessary within this Precinct to establish an acceptable standard of amenity.

There was a common perception that Council should do more to upgrade general amenity in the area. Streetscape improvements and better management of on-street car parking were included in these suggestions.

8.14. Conclusion

The survey results from both the residents and businesses in this area reflect that the occupants are generally satisfied with its operation. There are however, some definite areas raised for Council intervention and improvement.

Information gained from this consultation and preceding chapters is drawn together in the next chapter. This analysis establishes the appropriateness of the existing planning framework and identifies areas which may require some rethinking.

9. Summary and Discussion of Issues in the Case Study Area

9.1. Introduction

The previous chapters build a picture of the study area in terms of what is there? How did it evolve? What has been happening? and, What have been the characteristic functions of development since the inception of the City of Hobart Planning Scheme 1982?

This chapter draws the findings of these case study chapters together under a series of sections. It discusses whether the existing planning controls are appropriate. Where not, areas which require amending are indicated to ensure the future viability and efficiency of use of this area.

9.2. Use

Land use within the case study area shows a substantial mix of uses in the *Central Service, Central Commercial & Administrative and Commercial & Residential zoned Precincts*. Of these, the *Central Service Precincts* in particular display the broad ranges of use characteristic of 'frame' areas described in Chapter 2, such as wholesaling, general services, warehousing, residential and small offices.

A residential enclave is located within the study area at Trinity Hill. The residential character of this precinct is partly protected by its existing small lot sizes and use and plot ratio controls since the inception of the City of Hobart Planning Scheme 1982 in 1984. These have resisted pressure from the intrusion or intensification of non-conforming uses and eighty-eight percent (88%) of all uses remain as residential.

Applications for changes of use within the case study area were generally consistent with the preferred uses of each of the precincts. Additionally, the attitudinal survey within the case study area indicated that the occupants were mostly content with the operation of the area (71% of residential respondents and 88% of businesses respondents). From this, it can also be assumed business users are happy with the services provided from the area as the businesses would fold if their customers were unsatisfied.

Combined, these statistics are perhaps the most telling indicators of how suitable the planning controls are at present. The level of satisfaction points to the fact that the occupants find the flexibility of the planning system mainly appropriate. If the controls were too restrictive businesses would most certainly have indicated that the Council was uncooperative (usually the first sign if planning controls prevent development proposals). Conversely, if the use controls were too open one would expect a higher level of both dissatisfaction from the residents and conflicts between businesses.

The existing building stock displays typical characteristics of a central service area described earlier. There are signs of residential deterioration, with many buildings of a

residential nature now occupied by non residential uses. Intrusion of larger floor area premises such as warehouses is also obvious.

Within the case study area, districts of similar building stock character can be identified which generally possess building types better suited to certain types of uses. For example, small offices, specialty wholesalers, and residences are better suited to smaller residential scale buildings and saleyards and transport depots usually require large areas of open space. Areas with these specific building stock characteristics were identified in Chapter 6.

Two thirds of properties have been subject to some sort of planning application over the last fifteen years, although the majority did not involve significant change. Applications involving small extensions, signs and changes of use were common within the case study area. Collectively these formed 73% of all applications. Changes of use affected between 18-38% of sites in each precinct. As may be expected, these sorts of applications were less frequent in the Residential Zone. Applications for redevelopment, that is, those that involved a transformation of the site including a new use and building and possibly demolition, were not common (3% of all applications).

The frequency of these types of applications suggests that businesses partly locate in this area due to the availability of suitable and existing building stock. This assumption is reinforced by the survey of businesses, where the availability of suitable premises and a location close to the CBD, were each identified by one third of the respondents as the main factors influencing their initial choice of location.

The review of planning applications also indicates that occupants of the area have generally chosen to adapt existing premises to suit their needs, rather than construct new accommodation or floor space.

This again reflects characteristics of the 'frame' area described in Chapter 2, where service uses have traditionally been known to locate in the 'zone of discard' due to the availability of affordable premises in the less prestigious central areas of cities.

The lack of significant evidence of improvement of the building stock within the non-residential precincts is likely to be due to two scenarios:- either the land owners do not want to over capitalise within this area of lesser land values, or because the occupier is a tenant only and therefore reluctant to invest capital to modify extensively.

All these above indicators mean that demand for significant development within the case study area in the medium to short term is unlikely. The most efficient use of the building stock resources could therefore be gained by matching uses to the available building stock characteristics in each precinct.

As the case study area is fairly static in nature, it must be recognised that changes to the statutory planning framework alone will not provide substantial change. Proactive intervention, requiring Council or Government funding, akin to the 'Better Cities' or

the 'Wapping Implementation' projects are necessary to implement significant change. In this area, these projects could, for example take a similar approach to the 'Techno Park' in Glenorchy, and foster new innovative commercial industries.

9.3. Affect of Technological Change on Operation of Central Service Uses

Just as the technological changes, described in Chapter 2, altered the layout and characteristics of these 'frame' areas in the past, it is possible that changes relative to the 'information revolution', for example may alter the characteristics of these service providing uses in the future. A degree of flexibility within the planning system for the case study area will accommodate operational changes of these preferred service providers.

9.4. Residential Uses

The mix of residential and non residential uses was seen by 71% of residents as 'about right'. This level of approval indicates that it would be advantageous to maintain a similar ratio of these two use categories if possible. Furthermore, although it is not considered appropriate to try and convert this area into another inner-city residential neighbourhood (residential development usually occurs in areas of better amenity and it is anticipated that much of the demand for inner city living has been filled by Wapping, North Hobart & Sullivans Cove), it is thought that the existing residential component plays an important role within this 'central service' area. The value of retaining residential uses for passive surveillance, reducing crime and increasing amenity was covered in the work of Jane Jacobs (addressed in Chapter 2). Although it is acknowledged that crime is a broader social issue, requiring more than just planning intervention, it is considered that the encouragement of such uses within the case study area will improve its general operation with increased social ownership and occupation of the area past nine to five. Similarly, the location of other uses which operate beyond normal working hours and provide activity are also advantageous in this regard.

At present the planning controls, outside the residentially zoned *Trinity Hill Precinct*, don't prevent further displacement of residential uses. The existing stock of these uses remain through good luck rather than good management.

For example, the *Statement of Desired Future Character for Precinct 9* mentions that new uses must not detract from the amenity of existing residential properties. This gives the impression that the existing residential component was considered valuable within this *Precinct* at the time of the policy formulation. If this is the case, there is no mention of a desire for these uses not to be displaced and no explicit scheme provision prevents such displacement. Eight residential uses were displaced within this *Precinct* during the application review period.

For such a statement to be effective the schedules of the Planning Scheme need to be parallel. For example, provision of both: performance criteria to minimise detrimental effect on residential properties; and supportive use controls which actively discourage or prevent displacement of residential uses.

Additionally, the large number of stated problems by residents in Precinct 6A (35% of respondents), relating to crime, noise and parking in particular, indicates that the amenity in this precinct should be improved. This is reinforced by the 18% of respondents who stated they would like to relocate.

To rectify these issues over the long term, development should be subject to performance criteria. This would aim to reduce the impact of new businesses or extensions on residential properties or alternatively minimise the susceptibility of new residential development to detrimental effects. It would go beyond exercising the power of EMPCA, which mainly offers a 'fall back approach' for combating the above problems, and would provide a proactive approach to facilitate satisfactory co-existence of uses. The Planning Scheme provisions should also include a criterion to encourage good design.

Any performance criteria for non-residential uses should address issues of noise and smell emissions, types of acceptable activities for inside and outside adjacent to residential properties, hours of operation and traffic movements. At the same time, residential performance criteria should provide standards for sound proofing depending on the intensity of the adjacent uses.

9.5. Density

The density controls for each precinct vary significantly throughout the study area. Generally the precincts closer to the CBD have higher *plot ratio* potential under the Planning Scheme. This possibly reflects a higher property value and perceived demand for growth of the CBD at the time the Planning Scheme was conceived. The other similarly zoned precincts, further removed, have lower *basic* and *maximum plot ratio* provisions. The residential precinct has a smaller *plot ratio* again to ensure compatibility with the existing residential scale.

It is considered that the existing plot ratio provisions in Precincts 9, 8A and 6A, in particular will generally not be fully utilised. The existing densities of properties within the study area, excepting those within the 'residential' Precinct 7, are mostly well below these *basic plot ratio* levels. Furthermore, increases in the *plot ratio* of the individual sites through development under the administration of the Planning Scheme have mainly been small and the majority of businesses indicated no plans for extension.

Moreover, the preferred uses of this zoning generally do not involve buildings of more than two storeys. In these circumstances, by the time provision for car parking and access has been made, it is unlikely that a plot ratio in excess of 1.5 would be achieved. These characteristics are reflected through the existing densities of properties within the study area, where a plot ratio over 1.0 is the exception.

Although the concept of *bonus plot ratio* has conceptual merit as a method of encouraging desired outcomes, it is not likely to be effective in this case study area. Success of *bonus plot ratio* is basically reliant on a shortage of land, where it is an

advantage to be able to extend beyond the *basic plot ratio*. In the case study area however, as discussed above, there is no shortage of land and extensions have generally been small in size. In terms of the density potential endowed by the Planning Scheme the area may be considered under-developed.

In view of the above, it is considered appropriate to replace the existing system of plot ratios, in all but the residentially zoned Precinct 7, with a series of *permitted* building envelopes. These building envelopes should be established with consideration to heritage values, streetscape, scale, parking, environmental amenity, site layout and strategies for improvement to visual amenity by effective landscaping. On sites where building form is of less importance, the building envelope could be less specific to provide more flexibility.

It is not considered necessary to alter the existing density provisions for Precinct 7 as its lower maximum plot ratio of 0.5, combined with the setback provisions of Schedule D of the Planning Scheme have operated effectively. The success of these controls for maintenance of a residential scale was demonstrated both over the development application review period since 1984, and through the area's existing character.

9.6. Heritage

Approximately 70% of properties within the study area are either heritage listed, within a heritage area, or adjacent to a property that is. These properties are subject to the heritage provisions of the Planning Scheme. This study does not wish to challenge the merit of the listed properties of heritage areas, however it is acknowledged that there may be some scope for further analysis of the merit of non listed building stock within this area, particularly in relation to their contribution to the streetscape.

The existing heritage controls basically require development subject to these provisions to harmonise with the cultural heritage characteristics in the vicinity in terms of *bulk, setbacks, materials, colours and finishes*.

It has been established that the use provisions in this area are essentially appropriate and the preferred uses of this Central Service zoning typically involve either open yards or larger, warehouse type buildings. It is common that the character of such forms, necessitated by their function, may differ from the scale and possibly conflict with the heritage buildings. It is noted that the Planning Application review since 1984 revealed that many proposals subject to these provisions had conditions relating to setback, bulk, colours and finishes imposed on their permit.

These provisions should be more specific in terms of requirements for building within, or adjacent to heritage properties. The refinement of these controls should include performance criteria for detailing and finishes adjacent to common boundaries with heritage properties.

The proposed building envelope system described above under 9.5 above would also provide more certainty for developers and reduce conflicts with heritage attributes in the vicinity.

9.7. Streetscape Amenity & Landscaping

The *Objective* of the *Central Service* zoning encourages the progressive reduction of vacant or underutilised land however some of the *permitted* uses such as *saleyards* may be argued to encourage under utilisation of land and degradation of the urban streetscape.

In considering the role of saleyards within the study area it is important to remember that they are a ‘fact of life’ and a ‘necessary evil’ in terms of effect on streetscape. Of all zones within Hobart, this Central Service area is probably best suited for their accommodation. This is due to the availability of suitable land, the central location and the physical separation from areas of primarily residential use. It is therefore considered appropriate to provide for these uses in this case study area in the best possible manner which will reduce detrimental impact on streetscape amenity.

Some performance guidelines for such uses, relating to fencing, signs and lighting for example, may promote some positive outcomes in this regard. Additionally, saleyards should be a *permitted* use only in the areas where deterioration of built form and erosion of the street line is already evident such as along Argyle Street.

Both the business and residential surveys indicated that occupants within the area suggested that Council do more to maintain and upgrade footpaths and streetscape within the area. At present Council has no civic works programs in this area to contribute to such upgrading. However, the Landscaping Schedule of the Planning Scheme does provide some controls intended for urban enhancement.

It allows landscape upgrading to be imposed as conditions of approval on any change of use or new development. The review of planning applications since 1984 revealed that these conditions by way of submission and implementation of landscaping plans had been imposed on a large number of applications within the Central Service Zoned Precincts. Additionally, conditions requiring substantial bonds for the maintenance of such planting were imposed regularly.

Observation of the study area today reveals that very little of such planting is retained. Moreover the vegetation that is retained is generally scrappy and ad-hoc. This suggests that the imposition of such conditions has been ineffective.

A more productive initiative may be for certain new applications to contribute towards a civic works program in that area. This would ensure that works were implemented cohesively and maintained on a consistent basis by Council.

This civic works program should include a street enhancement scheme which recognises the traffic hierarchy, the needs of uses, users and improves residential amenity within the case study area.

9.8. Demolition

A large proportion of applications involving demolition over the review period have related to partial demolition, necessitated by upgrading of existing building stock. The

extensive coverage of the heritage controls means that these sorts of applications have been subject to the heritage provisions in the majority of cases.

Partial demolition has been considered acceptable and part of the ongoing evolution of the area. It relates to the functional characteristics of this central service area where the changing needs of businesses require the flexibility to allow for changes to premises.

There have also been a relatively small number of applications for complete demolition. Most of these properties are also subject to the heritage provisions and are *discretionary*.

Buildings on sites which are not subject to the heritage provisions however, may be demolished as long as there is a suitable replacement development. A replacement would not necessarily involve new building work and may only be for a car yard for example. This could potentially lead to further degradation of the built fabric and streetscape when numerous cleared, underutilised and possibly suitable properties may surround.

To combat these issues, it may be possible to accommodate land extensive use in areas which already display deterioration of built fabric. This would provide for a more positive contribution to the environment and especially the streetscape. Major demolition within other areas, displaying a presence of good building stock should then be discouraged, with the potential to enforce conditions to minimise detriment to the streetscape if deemed appropriate.

9.9. Site layout

The existing Planning Scheme provides very little guidance for site layout of new developments. There is definitely scope for improvement in these areas which again could utilise performance measures to create some positive results towards the upgrading and urban enhancement of the area.

Additionally, the proposed building envelope system for built density would allow consideration of site layout, access and car parking.

9.10. Traffic

The streets within the case study area fall into two obvious categories. There are the north-south orientated streets, characterised by high volumes of through traffic (15000 vpd) and one way movement, and the cross streets with much reduced traffic volumes (3000 vpd). These characteristic patterns of traffic movement raise different implications for the operation of uses on these frontages.

Saleyards for example, require a prominent location and are well suited to areas with large volumes of passing traffic providing customers can safely stop outside the premises in the fast moving traffic. Alternatively, a residence, office or consulting room does not usually require a highly visible site and may be better serviced by areas of less traffic disturbance.

The requirements of access and egress to a site are also relevant to the type of use and traffic conditions. Any use generating a large number of heavy vehicle movements would be best suited to a site which could facilitate access in a forward direction without obstructing passing traffic movement.

9.11. Parking

Problems relating to lack of and abuse of car parking in the study area were raised by both residents (12% of respondents) and businesses (18% of respondents) as the biggest dislike of this location.

Under the existing planning controls, cash-in-lieu may be accepted in all but the residential Precinct. Additionally, the car parking requirements can be waived on all sites subject to the Heritage Schedule if it is considered that the provision of all, or part of the parking may detract from the cultural significance of a property. Collectively, these allow the development of all sites within the case study area without any associated car parking provision.

On street parking within the area is subject to parking restrictions and parking meters with times ranging from 30minutes to 4 hours. Vouchers are available for residents and allow unlimited parking within the restricted areas. Both methods of parking control are patrolled by Council parking staff, however due to resourcing problems, these restrictions are patrolled an average of only once a week. This on-street parking regime must be patrolled regularly and at random if it is to be effective. It is likely that this would reduce many of the problems raised by survey respondents.

Although there was notable reference to car parking problems throughout the area, a higher number of complaints were obvious in Precinct 6A. This level of dissatisfaction is not surprising when it is also noted that this precinct has the highest number of properties without off-street parking. It is likely that this parking deficiency places increased pressure on the on-street parking regime and causes inconvenience for the area's occupants and users alike. The lack of parking facilities for the Hobart Technical College, located to the south east of the case study area on Campbell Street, exacerbates this shortage. A strategically placed off-street car park facility within this Precinct would assist with both these issues.

The existing Planning Scheme provisions only apply to new proposals and will do nothing to improve the existing problems relating to shortage of parking. A broader Council initiative for off street parking is considered the only effective option to overcome the existing problems. These issues have been investigated previously in the North Hobart Parking Investigation 1993.

Illegal parking by other businesses on private spaces was also raised as a problem. Strictly this is an area out of Council's jurisdiction however, Council already contracts its parking surveillance services to a number of sites within the case study area. This service should be better advertised to business operators.

9.12. Sustainable Development & Environmental Performance

As mentioned, planning within Tasmania operates under the Resource Management and Planning System which is essentially based on ‘sustainable development’ principles and natural resource management. The objectives of this system demand sound strategic planning and explicitly incorporate economic, environmental, cultural and social factors into the planning process. Given this it is appropriate that the policy framework for this case study should address issues of amenity protection, efficient use of existing resources and environmental performance.

Specifically, the planning system should recognise that this central service area provides an important support role to the operation of the City of Hobart (small offices, shops, hardware stores and used car yards) and includes many uses which act on a metropolitan basis which have a regional role such as specialist wholesalers, larger offices and new car yards and showrooms. Moreover, although this study has not investigated the origin of users of the study area, it may be the case that this central location is most efficient in terms of economy of transport and reduced distances of travel for its uses. The economic importance of this area for employment must also be recognised.

The encouragement of residential uses should provide passive surveillance and public ownership of the area and increase general amenity. This will reflect favourably and improve the social environment of the area. Additionally, the proposed initiatives for efficient use of the existing building stock, protection of cultural heritage values and the discouragement of demolition will ensure sound resource management in the context of this case study area, and performance criteria for managing use conflicts, protecting residential amenity and for waste disposal will increase environmental protection.

9.13. Signs

The large number of both existing signs and applications for new signs (approximately 25% of all Planning Applications) possibly result from the large number of changes of use and reflect the commercial and drive-by nature of this central service area. More than one sign on a property is common as is the repetition of message. The existing signage provisions are similar for all but the residential precinct within the study area. They are reflective of the area’s intended character and allow quite large signs including *pole signs*, *wall signs* and *roof signs* as permitted.

The existing signage provisions of the Planning Scheme are quite comprehensive with standards to prevent new signs from dominating or obscuring other signs, clutter or repetition of message and interfering with the amenity of adjacent properties. It is considered that principles of these standards are generally adequate although, these provisions should also recognise the different demands for signage relating to street layout and differentiate between the north- south, one way through streets and the less busy cross streets.

9.14. Precinct boundaries

The existing precinct boundaries are basically a reflection of the existing road layout, topography and land use. Precinct 7, characterised by smaller lot sizes and residential building stock, essentially occupies the knoll of Trinity Hill. Precincts 8A and 8B consist almost exclusively of properties fronting Elizabeth Street. The remainder of the study area is occupied by the Central Service Precincts.

These boundaries are generally considered appropriate although some areas of cohesive building stock character can be identified within these Central Service Precincts (the refinement of such areas may require a further building stock analysis). This suggests that some new precincts, which individually are better suited to specific uses within the ambit of the Central Service zoning, may be appropriate. For example, an area of car yards, showrooms and large floor area - warehousing type buildings is apparent along both sides of Argyle Street and the western side of Campbell Street. Additionally, there is a higher presence of smaller buildings within the areas of Precinct 9 to the west of Elizabeth Street and to the east of Campbell Streets (where new offices were prominent during the application review period since 1984). The refinement of the permitted uses for each of these precincts would aid to reduce undesirable deterioration of the built fabric, and protect and improve the integrity of the streetscape.

Another boundary obvious as worthy of adjustment relates to the properties at 30 to 38 Patrick Street which are currently within Precinct 7 and zoned Residential 1.

All four properties pre-existed the City of Hobart Planning Scheme 1982 and have existing use rights as offices.

These four properties are clearly not suited to residential zoning. They are not consistent with the preferred residential uses and have all accommodated non-conforming uses to this zoning for over twenty years. These sites are physically removed from the rest of Precinct 7 and are located on the opposite side of Patrick Street to the rest of the Trinity Hill Precinct.

These properties should be rezoned to Central Service. The existing buildings are large and are not suited to *houses* (the only *permitted* use) which characterise the rest of the precinct. In addition, these buildings would require substantial building alterations before they could be used for any of the *discretionary* uses such as *flats* or *multiple dwellings*. Demand to change these to residential uses is therefore unlikely.

It is not considered that a rezoning of these properties would result in a loss of streetscape or cultural heritage significance of the Trinity Hill Precinct especially if the proposed building envelope provisions were imposed. Additionally, future development of these sites would be subject to the heritage controls.

9.15. Conclusion

This chapter has drawn together the analysis of this central service case study area in terms of its operation, the appropriateness of the current planning framework, and proposed directions to its future planning framework.

The next chapter recommends amendments to the current Planning Scheme based on these discussions and conclusions which will provide for the ongoing viability of this central service area.

10. Recommendations resulting from the Case Study

10.1. Introduction

These recommendations involve alterations to the current planning framework for the case study area. It is suggested that these changes are consistent with the Objectives of the Resource Management Planning System of Tasmania and the format of the proposed Model Planning Scheme and will ensure its future efficiency and viability of operation as a central service area of Hobart. They are provided on a conceptual basis only and not intended to directly replace existing clauses of the City of Hobart Planning Scheme 1982.

10.2. Objectives

The following objectives are derived from both planning theory and case study research and are intended as the guiding principles for future development within the case study area. The area has been shown to be functioning basically well, and these objectives are essentially the same in terms of the preferred uses and functions of the Statements of Desired Future Character of the existing precincts. A new emphasis however, is recommended with relation to efficient use of existing building stock resources, streetscape upgrading and minimising detrimental effects between different uses.

- The area should continue to provide services relevant to the operation of the CBD or the wider Hobart region but which are not suited to the CBD or residential zones.
- Encourage operation and occupation of the area beyond nine to five.
- The area should recognise residential uses as an important activity within this mixed use area and the planning provisions should protect the amenity of these uses.
- Intensification of non-residential uses within the Trinity Hill residential Precinct should be discouraged.
- A consistent strategy for the improvement of streetscape appearance should be provided which also acknowledges the needs of the businesses within the area.
- The operation of uses should not be to the detriment of neighbouring properties.
- Recycling of existing buildings particularly those of cultural heritage significance should be encouraged within the study area.
- Encourage new uses to locate in areas where the existing building stock and traffic movements are suited to their characteristic functions.
- To encourage new development which does not conflict with the cultural heritage values of the area.
- Encourage the utilisation of vacant buildings or sites.

10.3. Use

10.3.1. Non Residential

The existing zoning of areas within the case study area is generally appropriate although some alterations to the preferred uses, depending on the compatibility of the existing building stock character should be made. Matching areas of characteristic

building stock to the demands of particular uses will encourage efficient use of the existing buildings and open land and should reduce further deterioration of the built fabric through demolition. Figure 10.3.1 illustrates the recommended precinct boundaries, their characteristics and preferred functions.

The area on both sides of Argyle Street and the western side of Campbell Street is characterised by properties with low built densities and open land without buildings aligning the street. These attributes demonstrate deterioration of the built fabric and the occupation of uses such as car yards, large floor area warehousing type buildings and showrooms. As significant new buildings and large extensions are unlikely within the case study area in general, it is appropriate to continue to encourage uses which are land extensive in this precinct. These uses such as *saleyards*, *warehouses* and *showrooms* should therefore be permitted within these precincts.

In contrast to the area mentioned above, there is a presence of higher quality building stock, increased built density and a larger number of smaller buildings within the areas of Precinct 9 to the west of Elizabeth Street and to the east of Campbell Streets. These characteristics are better suited to the more land intensive central service uses. It is therefore recommended that *saleyards* be *discretionary* within these areas.

As previously mentioned, the statutory planning framework alone will not invoke significant change in the short term. Proactive initiatives are also necessary to activate more efficient use of this area.

To this end it is recommended that Hobart City Council and the State Government should consider a programme to foster the establishment of new innovative uses which acknowledges and promotes the central service providing role of this area. This programme may involve the construction of a new facility designed specifically to accommodate new businesses at ‘infant’ stages which demonstrate ‘world’s best practice’ in niche industries and in the provision of services. The details of operation for such a programme would require further consideration.

The preferred location of a facility of this kind would be within Precinct 6B (see figure 10.3.1) as this precinct displays the highest degree of underutilisation. It is hoped that the positive ‘on flow’ effects of these new uses would entice other activities to their vicinity and ‘kickstart’ increased usage of this area.

10.3.2. Residential

The displacement of residential uses within the case study area should be discouraged. The use provisions of all precincts within the case study area should be amended to make any application involving a change of use which displaces an existing residential use *discretionary*.

Saleyards, Showrooms permitted - suitable visible location fronting street with large traffic flows. Generally deterioration of building stock, erosion of street line and new substantial building work is unlikely.

Preferred location for a new facility to foster new innovative businesses or utilising 'world's best practice'. A joint initiative between HCC and State Government

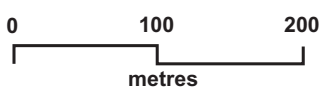
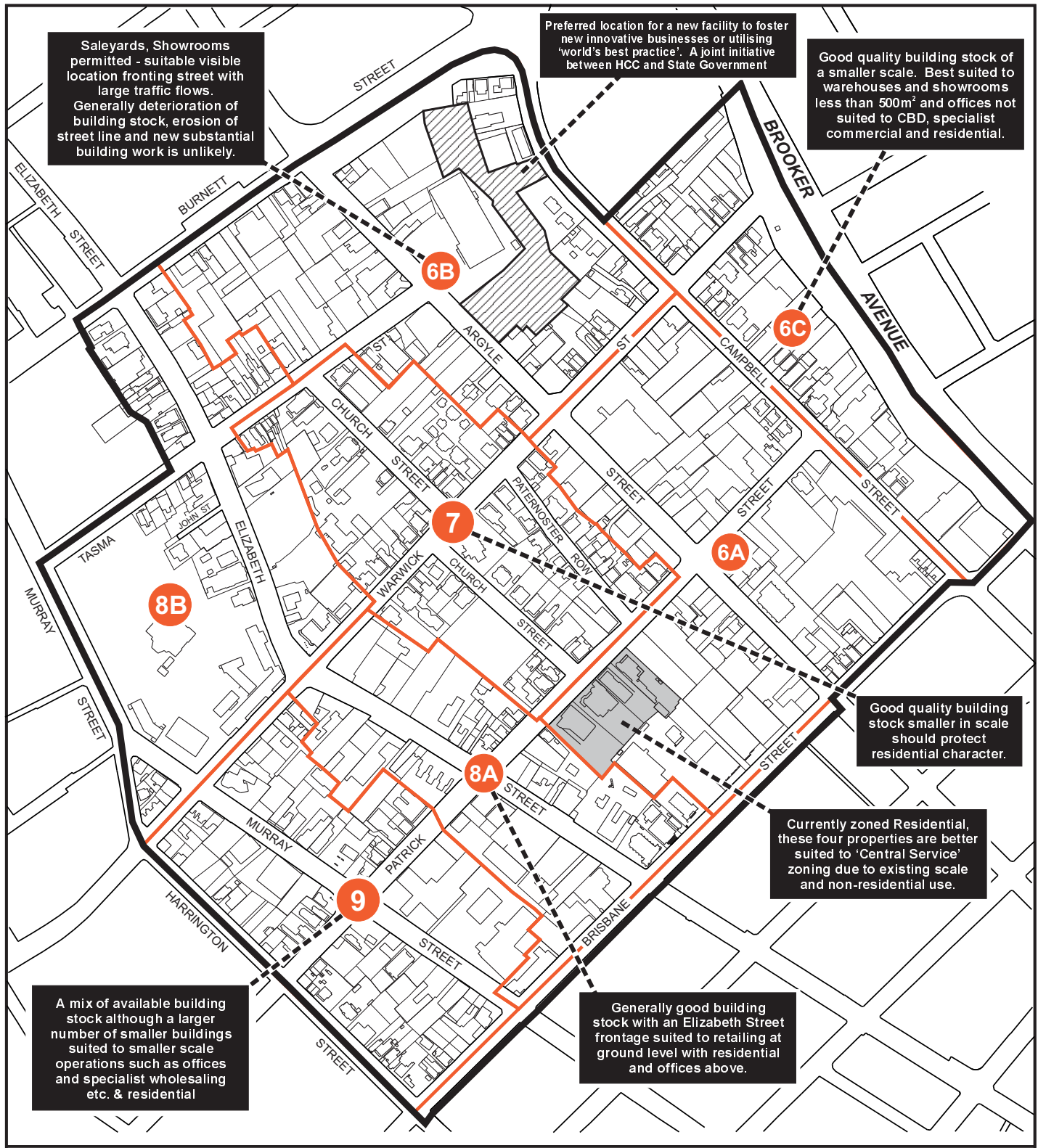
Good quality building stock of a smaller scale. Best suited to warehouses and showrooms less than 500m² and offices not suited to CBD, specialist commercial and residential.

Good quality building stock smaller in scale should protect residential character.

Currently zoned Residential, these four properties are better suited to 'Central Service' zoning due to existing scale and non-residential use.

Generally good building stock with an Elizabeth Street frontage suited to retailing at ground level with residential and offices above.

A mix of available building stock although a larger number of smaller buildings suited to smaller scale operations such as offices and specialist wholesaling etc. & residential



- Precinct No. 9
- Precinct Boundary
- Study Area Boundary

RECOMMENDED PRECINCT BOUNDARIES, THEIR BUILDING STOCK CHARACTERISTICS AND PREFERRED FUNCTIONS

10.3.1

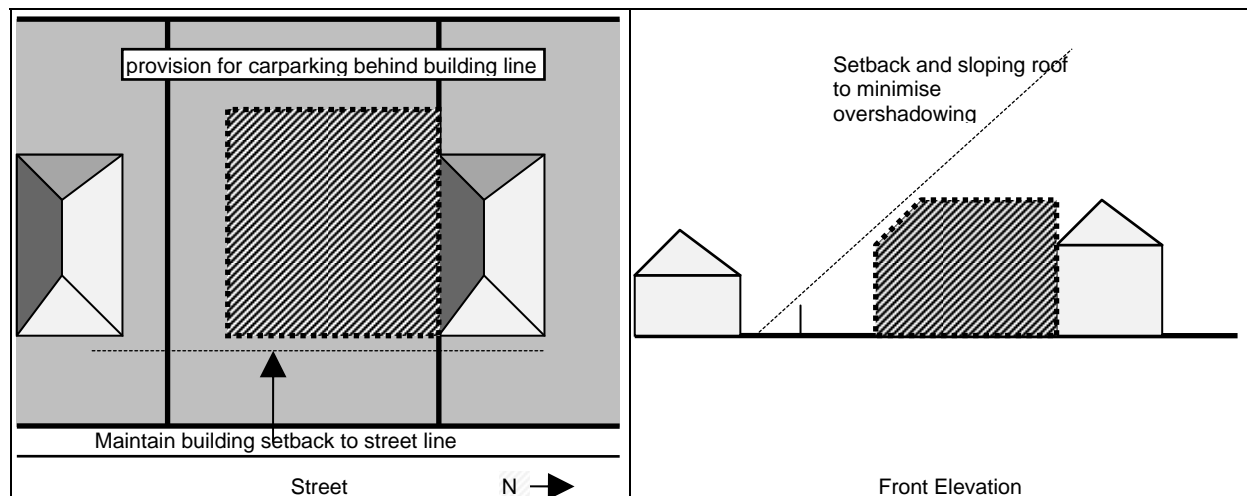
10.4. Density, Built Form and Siting

It is recommended that *permitted* building envelopes be identified for each site with regard to the following objectives:-

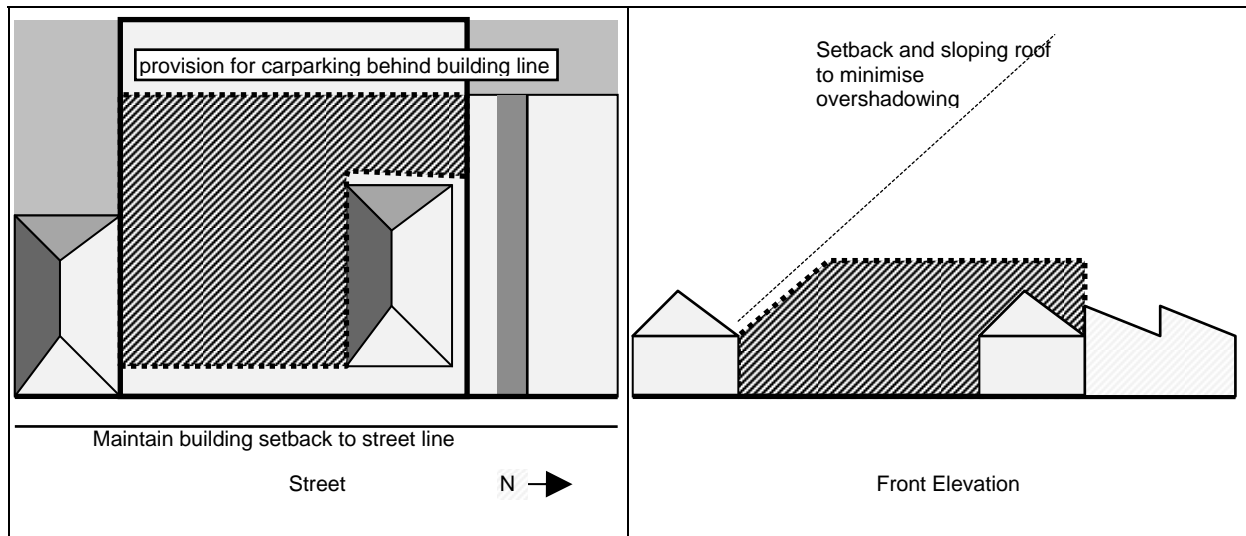
- To ensure that underutilised land is used for appropriate purposes without adversely affecting existing building stock and streetscapes.
- To ensure that buildings are sited to protect amenity, sunlight and privacy of adjoining residences.
- To ensure that new development does not conflict with the heritage values, streetscape, scale or amenity of the area.
- To ensure that car parking and site layout contributes to the repair and maintenance of the streetscape in this area.
- To ensure that car parking and site layout minimises the potential for detrimental effects on the amenity of neighbouring properties.
- To provide for new development within the case study area which fulfills the needs of business operators and residents whilst improving the amenity of the case study area.

The following diagrams provide examples of likely building envelopes for sample sites of varying characteristics within the case study area.

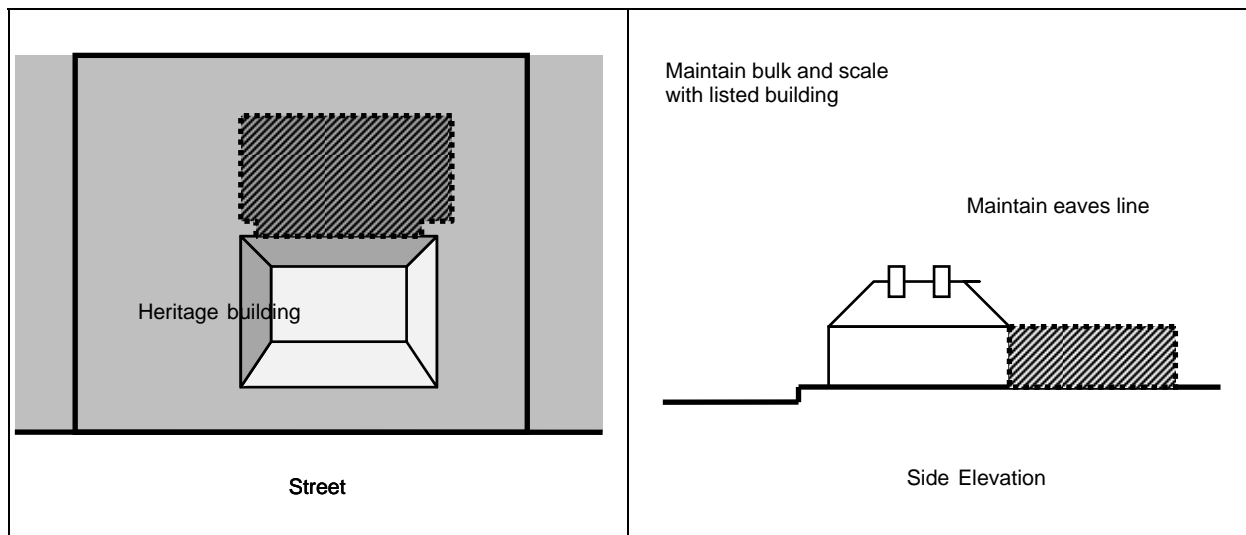
Sample site 1 - Vacant with Existing Buildings Adjacent



Sample site 2 - Partially developed



Sample site 3 - Heritage building



It is recommended that a development which proposed to vary these envelopes would be *discretionary* and subject to the following Performance Criteria.

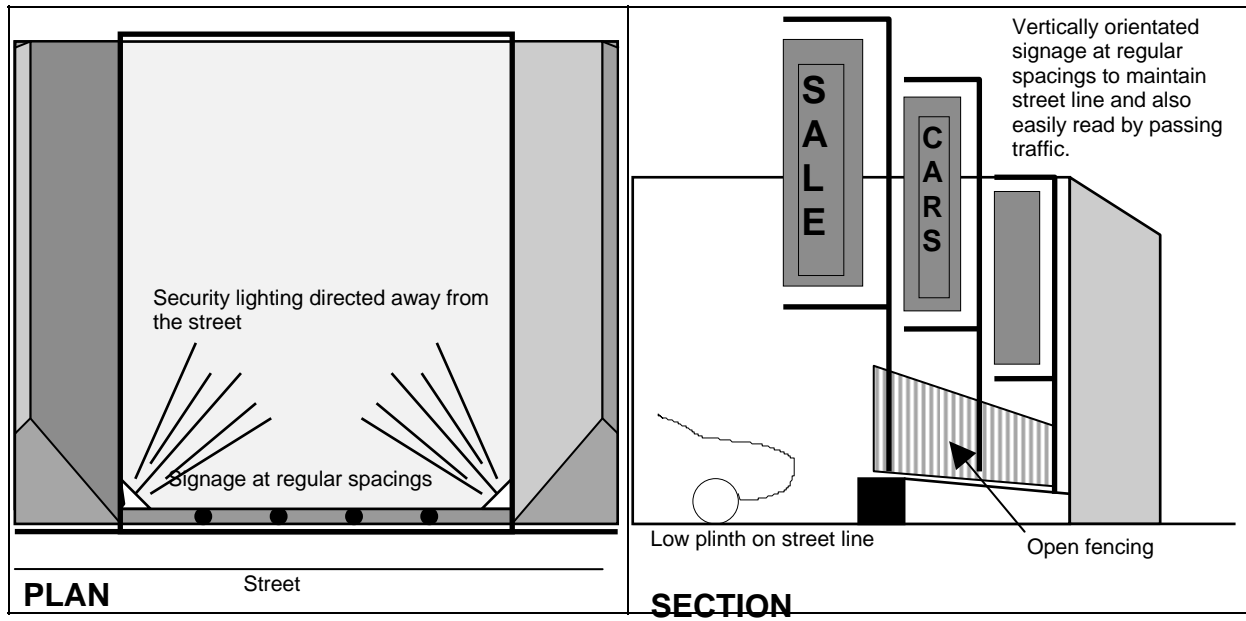
Objective	Acceptable Solutions	Performance Criteria
See 10.4 above	New development shall be in accordance with the building envelope for that site.	Where a development seeks to vary the building envelope for that site the applicant must demonstrate that there is no unreasonable detriment from noise, overlooking, overshadowing and visual intrusion to nearby properties, the street, heritage values or the quality of the environment.

Ideally these building envelopes would be identified by Council for each site in the preparation of the statutory plan. It is acknowledged however that such an exercise would be time intensive. A more realistic alternative may be for the developer to submit a building envelope with any new development application with regard to the above objectives.

10.5. Streetscape

Objective	Acceptable Solutions	Performance Criteria
Discourage deterioration of the streetscape and encourage new uses to occupy sites and or buildings which are compatible with the existing building stock.	New saleyards, warehouses and showrooms are to be located within Precincts 6A or 6B	Where development (including demolition) is proposed for a saleyard, warehouse or showroom outside Precincts 6A and 6B it will only be approved where it can be shown that it will not detract from the streetscape.
To maintain, improve and repair the streetscape	Design of new saleyards should be in accordance with figures 10.5.1 and 10.5.2	New saleyards should provide fencing, lighting, and signage solutions which reinforce the street line and contribute to the streetscape.

Figures 10.5.1 and 10.5.2 - Acceptable Solution for Design of a Saleyard



10.6. Amenity

Objectives

- To ensure that new development including changes of use are designed to minimise the impact of their proposed use on the amenity of nearby properties.
- To reduce the susceptibility of new uses to detrimental effects of existing activities in the vicinity.

Objective	Acceptable Solutions	Performance Criteria
<p>To ensure that the use and/or development within the case study area does not adversely affect the character or amenity of nearby uses.</p>	<p>Noise</p> <p>(a) The use does not involve noise intensive activity.</p> <p>(b)(i) Buildings are to be sited, designed and constructed of materials to ensure no significant loss of amenity to adjacent uses. (see figures 10.6.1 and 10.6.2)</p> <p>(ii) Any noise intensive activity (such as grinding, sanding or using heavy machinery) must be contained within a building and shall not emit noise more than 10dBA above the normal ambient dBA.</p> <p>(iii) Noise intensive operation, that is an activity which emits a noise greater than 5dBA above the normal ambient dBA, shall be limited to the hours of 7.00 am to 9.00 pm (this includes heavy vehicle movements).</p>	<p>(a) Where an activity will produce noise in excess of the acceptable solutions it must demonstrate that the noise emission will not unreasonably detract from the amenity of the adjacent use.</p>

Objective	Acceptable Solutions	Performance Criteria
	<p>Overshadowing Buildings shall not exceed the permitted building envelopes.</p>	<p>Where a development fails to meet the permitted building envelope it is not to result in a greater loss of sunlight in terms of extent or duration, to windows, habitable areas or useable landscape space of adjacent properties than would have been the case if the building were within the building envelope.</p>
	<p>Overlooking a) Fenestration of new buildings shall not directly overlook habitable areas or private open space of a residential property. b) Fenestration of new buildings overlooking habitable areas or private open space of a residential property shall have a sill height of 900mm.</p>	<p>Where overlooking of habitable areas or private open space of residential properties occurs with new development it must be shown that this will not result in unreasonable loss of privacy to users of those areas.</p>
	<p>Smell/ Odour a) Uses do not involve processes which emit smells or toxic gases. b) A use which does involve processes which emit smells or toxic gases shall install filtering equipment sufficient to prevent these smells from being obvious or harmful to nearby properties.</p>	

Objective	Acceptable Solutions	Performance Criteria
<p>Minimise the susceptibility of new development to detrimental effects of adjacent uses</p>	<p>A residential use shall not locate adjacent to an existing noise intensive activity which regularly emits noise greater than 10dBA above normal ambient dBA levels.</p>	<p>A residential use proposed adjacent to a noise intensive activity shall be designed and constructed so as to reduce its susceptibility to the noise emissions. (see figures 10.6.1 and 10.6.2 - parapet walls, positioning of fenestration, double glazing, site layout)</p>

Figure 10.6.1 - Building Siting, Design & Construction to Minimise Detriment Between Adjacent Uses (PLAN).

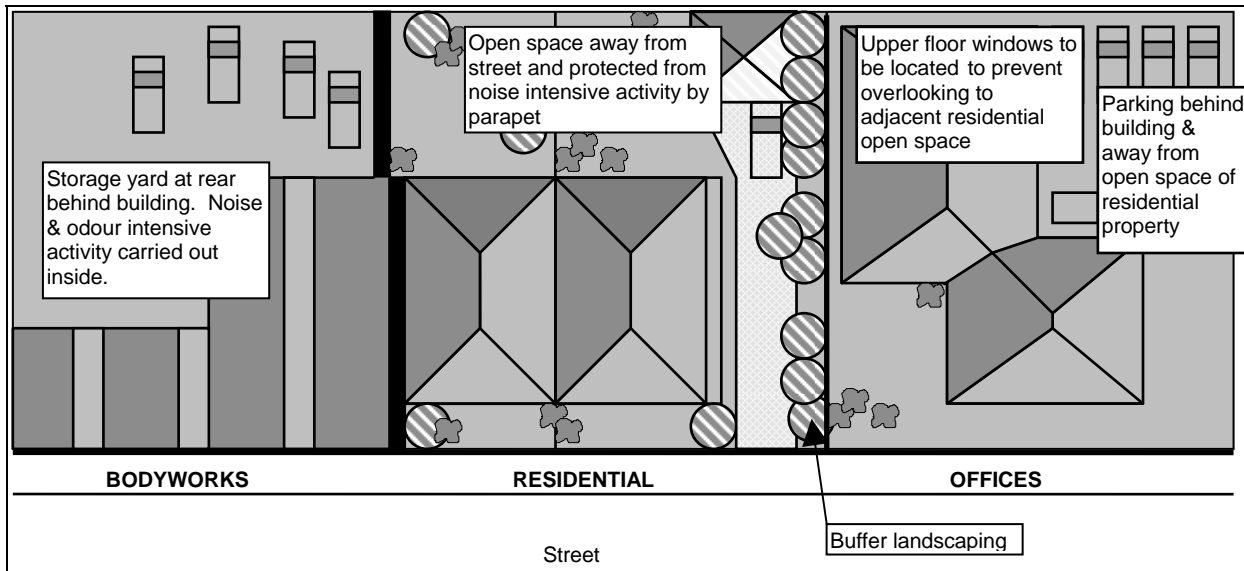
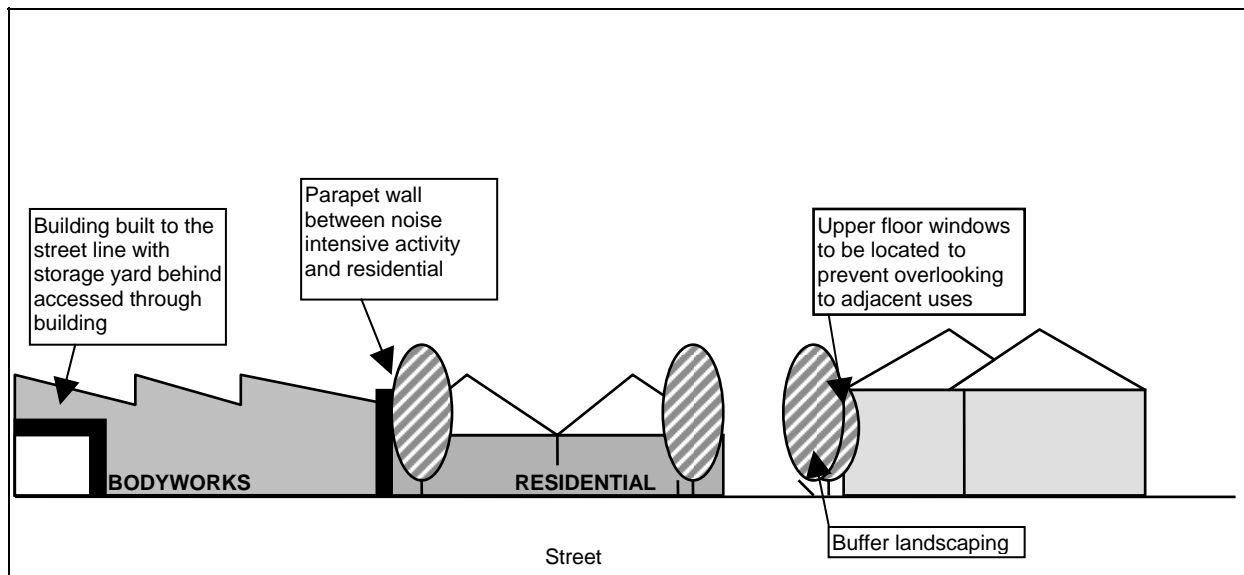


Figure 10.6.2 - Building Siting, Design & Construction to Minimise Detriment Between Adjacent Uses (ELEVATION).



10.7. Streetscape Improvements and Landscaping

Objectives

- To encourage a cohesive approach to landscaping and street improvements within the case study area which recognises the street hierarchy.
- To accommodate the 'exposure' and display needs of business within the area.
- To maintain and upgrade footpaths and streetscape within the area.

It is recommended that the existing system of requiring on site landscaping as a condition of approval be replaced by requiring new applications involving significant development to contribute towards a civic works programme of Council's in the area. This would ensure that works were implemented cohesively and maintained on a consistent basis by Council. Alternatively, there is scope to require new developments to enter into Part 5 agreements under the Land Use Planning and Approvals Act 1993 with the Council, to obligate them to carry out work off-site in the street.

As was shown from the planning application review, only two-thirds of properties were subject to any sort of development during the last fifteen years and of these many only involved minor applications for signs or small extensions for example. In these circumstances it must be acknowledged that the statutory planning framework alone cannot invoke significant change in the short to medium term. Proactive initiatives are also necessary to induce positive results.

An additional rates contribution, under Section 234 of the Local Government Act 1962, is thought necessary from all properties with a street frontage within the study area to implement these works successfully. (This system has been used in

Launceston to carry out streetscape improvements in Brisbane Street. Eighty percent of businesses with street frontages were in favour of this initiative²⁰.)

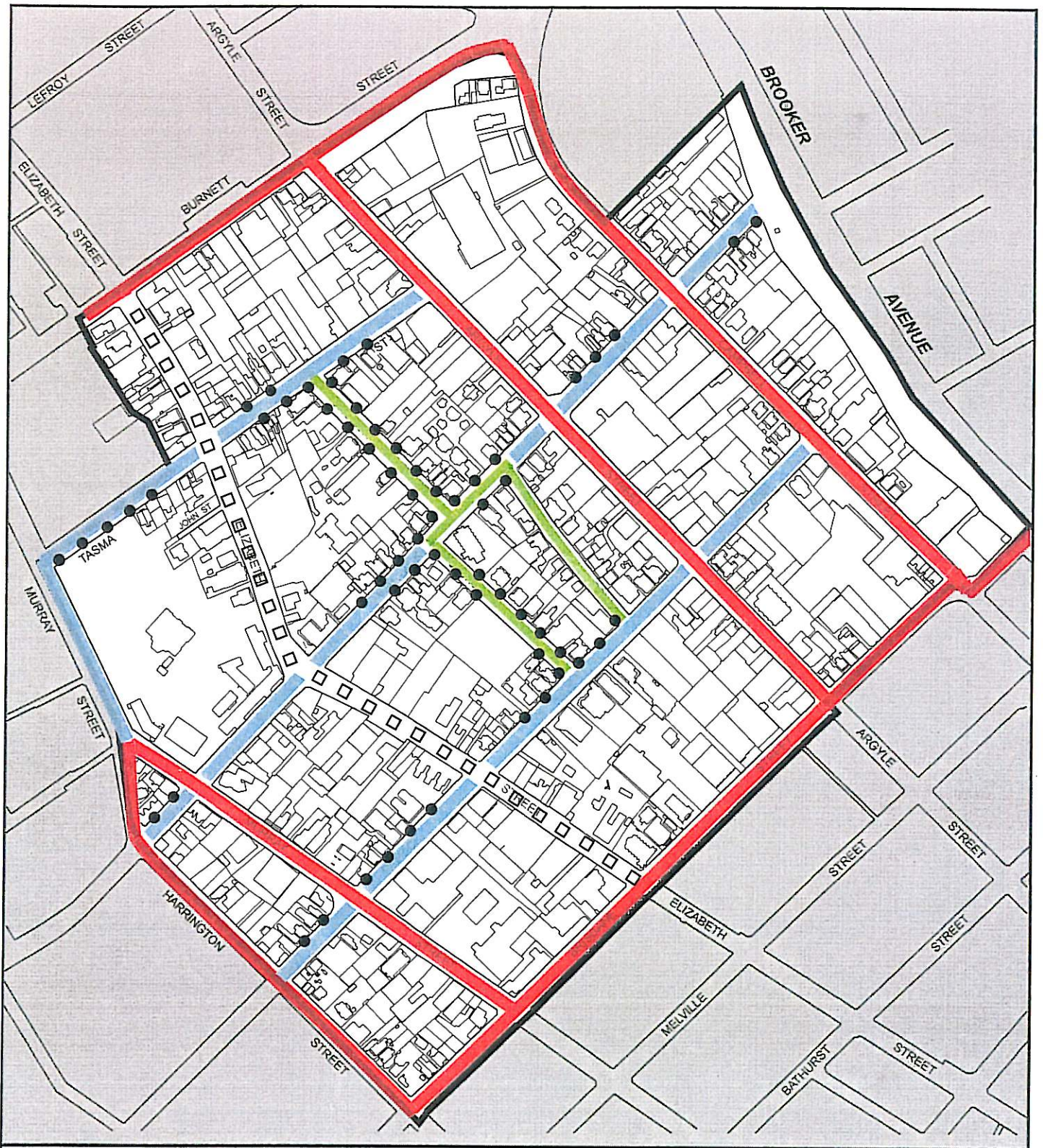
It is recommended that the streetscape upgrading be in accordance with the scheme set out in Figures 10.7.1 and 10.7.2. This scheme would recognise the needs of businesses for adjacent on street customer parking and visibility to passing traffic, whilst also providing increased amenity for residents especially in the cross streets.

This civic works scheme would provide different solutions for the three characteristic street typologies within the case study area. That is: the higher traffic volume streets of Campbell, Argyle, Elizabeth, Murray, Harrington and Burnett; the secondary cross streets of Tasma, Warwick and Patrick; and the internal streets of Trinity Hill.

The principles of this scheme are:-

- Recognise the street hierarchy within the study area and provide different design strategies to accommodate the varying characteristics of this hierarchy.
- Provide simple, cost effective improvement to the streetscape which is easily maintained
- Provide for the drive-by exposure necessary for businesses within the case study area.
- Provide landscaping to improve general streetscape appearance and improve residential amenity whilst recognising the commercial nature of the area.
- Provide short term on-street car parking adjacent to business premises where necessary.

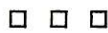
²⁰ HCC, "North Hobart Car Parking Investigation", 1993, P 120.



Pavement upgrading in Elizabeth Street to acknowledge central pedestrian spine to CBD. No planting

Planting and curb bulbing in front of residential properties - provision for on street customer carparking in front of businesses

Planting of street trees



Consistent planting and general paving upgrading in residential areas



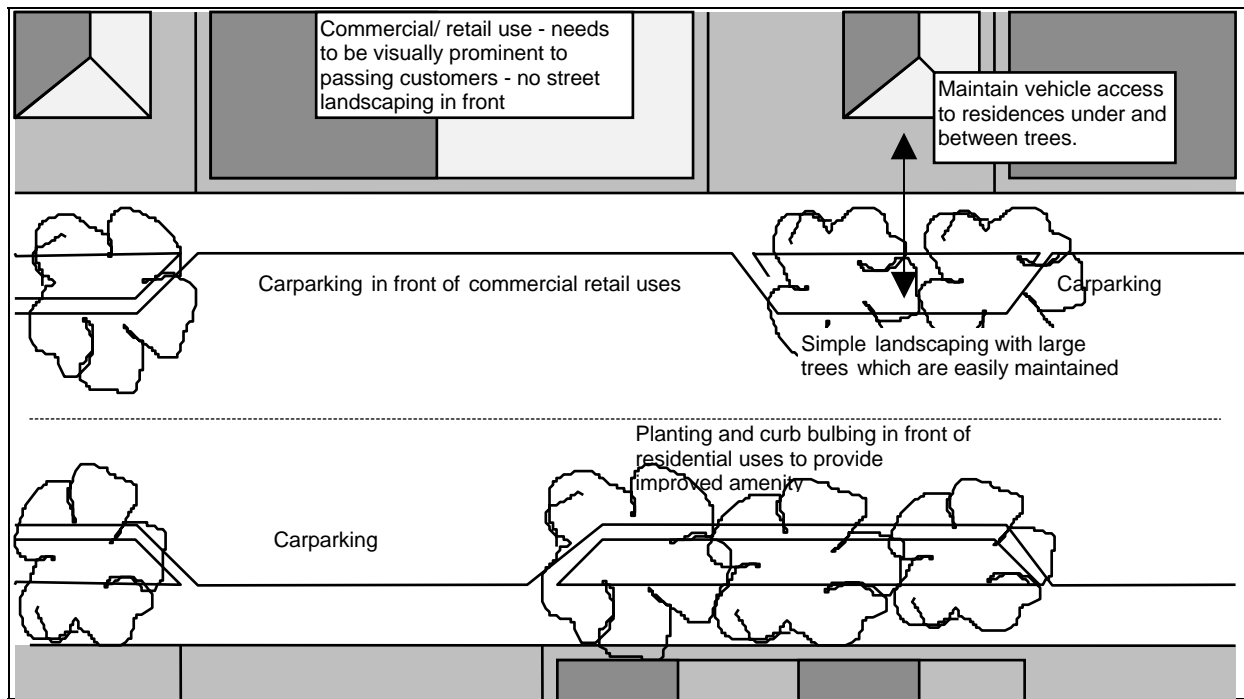
Limited upgrading to footpaths in streets with higher traffic volumes - no planting



CIVIC WORKS SCHEME

10.7.1

Figure 10.7.2 - Principles for Streetscape Upgrading for the cross-streets which recognise the needs of Businesses and Residential Properties (PLAN).



10.8. Heritage

Objectives

- To provide for central service uses within the case study area without detracting from sites of cultural heritage significance.
- To ensure the bulk and scale of new development does not detract from the cultural heritage significance of listed buildings or heritage areas.
- To ensure that the detailing and finishes of new development adjacent to common boundaries with sites of cultural heritage value don't detract from the significance of that property.

It is difficult to provide a set of complete standards for dealing with development affecting heritage values as each site presents different circumstances. The most effective method to ensure that new development respects the integrity of listed buildings is to provide standards to control scale.

It is considered that the proposed building envelope system, described under 9.4 above, could be used to provide these outcomes if the envelopes were constructed to maintain height and setback with adjacent listed properties. The envelopes would provide a degree of certainty for developers whilst also reducing potential conflicts with heritage attributes in the vicinity.

The following performance criteria are recommended for consideration for new development on or adjacent to sites of heritage significance.

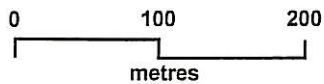
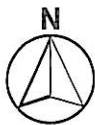
- New buildings and works must be detailed and finished to be recognisable as new whilst respecting the heritage attributes of nearby heritage items.
- New buildings and works must not reduce the apparent authenticity of historic places by mimicking historic forms.
- New buildings proposed adjacent to heritage buildings shall not have a greater setback to the street than that building.
- The eaves height of new buildings shall not exceed the eaves height of nearby heritage buildings.

Further analysis of the merit of building stock within this area may be necessary to assist with the construction of the building envelopes and consideration of the cultural heritage and or streetscape significance of unlisted buildings.

10.9. Carparking

Objective	Acceptable Solutions	Performance Criteria
To ensure that carparking facilities are adequate to meet the needs of both residents and users of the area.	Vehicle parking spaces shall be provided in accordance with the existing requirements of the Traffic, Access and Parking Schedule E of the Planning Scheme.	The car parking provision may be relaxed where the location of an existing building on the lot makes the provision of vehicle parking spaces impracticable or undesirable.
To ensure that the provision of parking does not adversely affect the appearance of existing buildings and the streetscape.	Land directly between buildings and the street shall not be used for the manoeuvring or parking of vehicles.	Parking and access areas are to be appropriately located and designed so as not to detract from streetscape amenity.
To ensure that vehicles associated with new uses and developments do not obstruct traffic flows.	On site loading, unloading and manoeuvring space for service vehicles is to be provided for use and development requiring delivery of goods in accordance with AS 2890.2	

It is recommended that Council's on-street carparking restrictions be reviewed to ensure that the time limits are compatible with the needs of adjacent uses including short term parking near retail and commercial premises and longer time limits only where businesses would not be affected.



Proposed new carparking facility to service the Hobart Technical College



Proposed new public carparking facility



PROPOSED LOCATIONS FOR NEW OFF-STREET CARPARKING FACILITIES

10.9

These restrictions must be patrolled regularly and at random to ensure their effectiveness. Additionally, Council already contracts its parking surveillance services to a number of private off-street car park sites within the case study area. These services could combat illegal use of private spaces and should be better advertised.

Lack of expenditure to date indicates that the existing cash-in-lieu contribution system will not provide replacement off-street car parking within the study area and also only relates to new developments. Sites which already have a shortage of off street parking are not subject to these controls.

A Council initiative for off street parking is considered the only effective option to overcome the existing problems. The North Hobart Parking Investigation 1993 discusses possible Council initiatives in this regard. It is considered that recommendation 7.3.6 of this study is of most merit. This proposes a separate rate (as with the streetscape improvement) for provision of carparking applicable to all properties. These recommendations are enclosed in Appendix 10.9 to this report.

The details of how such a separate rate can work requires a lot more investigation. However, it is considered fair that the contribution would only apply to properties which do not have sufficient off street parking provision. A contribution from Council which at least matches the total sum of contributions would also be appropriate.

Funds raised from this initiative should then be used to provide new off-street car parking facilities in strategic locations where a particular shortage is apparent (see Figure 10.9). It is thought that due to the dispersed nature of the area it would be more effective to provide a series smaller off street carparks rather than a smaller number of larger facilities.

10.10. Environmental Protection

Many of the issues relating to environmental protection are addressed above under Amenity, Heritage and Use. It is also considered appropriate that guidelines for methods of waste disposal, recycling, encouragement of passive solar design and use of energy efficient devices (such as heat pumps and timing devices) be established.

It is recommended that Council should prepare a schedule of rate rebates for properties which embrace these principles and practices. Although it is recognised that in most circumstances these practices are cost effective over the longer term, such a rate rebate is justifiable as it provides increased incentive for operators.

10.11. Signs

The existing signage provisions are generally sufficient to determine the appropriate number, dimensions, and positioning of new signs. G.9 of the Signs Schedule of the Planning Scheme provides standards to prevent obstruction of other signs and the cluttering or repetition of message. It is considered however that these provisions should also recognise the different demands for signage relating to street layout and differentiate between the larger, north-south, one way through streets and the less busy

cross streets. The establishment of the desired characteristics for these locations will require some further research but it is anticipated that more extensive signage would be suitable on the through streets.

10.12. Conclusions

Although the recommendations stem from the context of the case study area, at this conceptual level, common principles are apparent which relate to many central service areas of cities rather than exclusively for Hobart.

Essentially, these principles relate to the efficient use of the existing building stock resources, encouraging the displacement of residential occupation and minimising detrimental effects between uses.

BIBLIOGRAPHY

Attwater C R, Douglas J & Thorp V J - "Commercial Centres Strategy Development", HCC, 1997.

Australian Bureau of Statistics - "Hobart .. A Social Atlas", Commonwealth of Australia, Canberra, 1997.

Australian Bureau of Statistics - "Hobart Suburbs 1996", Commonwealth of Australia, Canberra, 1997.

Bourne, L S - "Comments on the Transition Zone Concept", Professional Geographer, Vol 20.

Duckett, I - "Residential Uses in Hobart's Frame Area", unpublished thesis, University of Tasmania, 1991.

Graham, R - "Dilemmas of Local Government Planning and Land Use Change: The Case of Hobart." Planning Research Centre, University of Sydney, Australia, 1981.

Hobart City Council - Land Use Records 1978.

Hobart City Council - Rates Information, 1998

Hobart City Council - "City of Hobart Planning Scheme 1982."

Hobart City Council - "Draft Sullivans Cove Planning Scheme 1997."

Hobart City Council - "Draft Revised Battery Point Planning Scheme 1997."

Hobart City Council - Property Files

Hobart City Council - "Central Area Strategy Plan", 1991.

Hoover, E M - "The Location of Economic Activity", New York, 1948.

Horwood, E M & Boyce R R - "Studies of the Central Business District and Urban Freeway Development", Seattle, 1959.

Howard, E - "Garden Cities of Tomorrow"

Hoyt, H - The Structure and growth of residential neighbourhoods in American Cities, U S Federal Housing Administration, Washington, 1939.

Jacobs, J - "The Death and Life of Great American Cities", Random House, USA, 1961.

Kays, S - "Transition Zone Theory and Land Use in Central Hobart", Unpublished Thesis, University of Tasmania, 1970.

BIBLIOGRAPHY

Middleton, C - "Facilitation of Mixed Use Development", Occasional Paper Series 2, Better Cities Program, 1995.

PIWE - "Draft Model Planning Scheme", 1997.

PIWE - "Land Use Planning and Approvals Act 1993"

PIWE - "Environmental Management and Pollution Control Act 1994"

Preston, R E - "The Zone in Transition: A Study in Urban Land-Use Patterns", Economic Geography, Vol 42, 1966.

Sim , D- "Change in the City Centre", Gower Publishing Company Ltd, Hampshire, 1982.

Solomon R J - "Urbanisation - the Evolution of an Australian Capital", Angus and Robertson Publishes, Sydney, 1976.